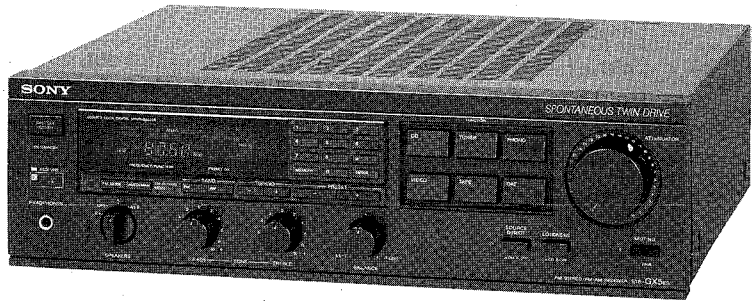
# STR-GX5ES

# SERVICE MANUAL

*US Model*
*AEP Model*




## SPECIFICATIONS

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm load, both channel driven, from 20 – 20,000 Hz, rated 80 wattes per channel minimum RMS power, with no more than 0.08% total harmonic distortion from miliwatts to rated output.

Other Specifications.

**Amplifier section**

Harmonic distortion
Less than 0.08% at rated output

Dynamic power output
120 watts + 120 watts (8 ohms, at 1 kHz IHF)
150 watts + 150 watts (4 ohms, at 1 kHz IHF)

Continuous RMS power output
80 watts + 80 watts
(according to DIN 45500)

Frequency response
PHONO: RIAA equalization curve ±0.5 dB
CD,DAT, TAPE, VIDEO } 5 Hz – 80 kHz $^{+0}_{-1}$ dB

Residual noise Less than 70μV (8 ohms, network A)
Damping factor 50 (8 ohms, 1 kHz)

Inputs

| | Sensitivity | Impedance | S/N(weighting network, input level) |
|---|---|---|---|
| PHONO | 2.5 mV | 50 kilohms | 87 dB<br>79 dB* (A, 2.5 mV) |
| CD<br>VIDEO<br>TAPE, DAT | 150 mV | 50 kilohms | 105 dB<br>86 dB* (A, 150 mV) |

*'78 IHF

Outputs
VIDEO AUDIO OUT
REC OUT
Voltage 150 mV
Impedance 10 kilohms
SPEAKER A, B
Accepts speakers of 8 – 16 ohms.
HEADPHONES
Accepts low and high impedance headphones.

Tone controls
BASS
±8 dB at 100 Hz
TREBLE
±8 dB at 10 kHz

Muting –20 dB

**Video section**
Inputs 1 Vp-p, 75 ohms
Outputs 1 Vp-p, 75 ohms

— Continued on page 2 —

MICROFILM

## FM STEREO/FM-AM RECEIVER

SONY®

**FM tuner section AM tuner section** (US model)

| | FM tuner section | AM tuner section |
|---|---|---|
| Tuning range | 87.5 - 107.9 MHz | 530 - 1,610 kHz (with the AM tuning interval set at 10 kHz) 531 - 1,602 kHz (with the AM tuning interval set at 9 kHz) |
| Antenna trminals | 300 ohms, balanced 75 ohms, unbalanced | External antenna terminal, loop antenne |
| Intermediate frequency | 10.7 MHz | 450 kHz |
| Sensitivity at 50 dB quieting | 18.3 dBf, 4.5μV (mono) 38.3 dBf, 45μV (stereo) | — |
| Usable senctitvity | 11.2 dBf, 2μV (IHF) | Loop antenna: 50 dB/m (at 1,000 kHz) External antenna: 100 V (at 1,000 kHz) |
| Signal-to- noise ratio | 82 dB (mono) 76 dB (stereo) | 54 dB (at 50 mV/m) |
| Harmonic distortion | 0.1% (mono), 0.2% (stereo) at 1 kHz | 0.3% (at 50 mV/m, 400 Hz) |
| Selectivity | 60 dB at 400 kHz | 40 dB at 10 kHz 35 dB at 9 kHz |
| Separation | 45 dB at 1 kHz | |
| Frequency response | 30 Hz - 15 kHz $^{+0,5}_{-1,5}$ dB | |
| IM distortion | 0.1% (mono) 0.2% (stereo) | |
| Capture ratio | 1.2 dB | |
| AM suppression ratio | 54 dB | |
| Image response ratio | 80 dB | |
| IF response ratio | 90 dB | |
| Spurious response ratio | 100 dB | |
| RF Intermodulation | 65 dB (800 kHz) | |
| Auto tuning threshoid | 30 dBf | |

**FM tuner section AM tuner section** (AEP model)

| | FM tuner section | AM tuner section |
|---|---|---|
| Tuning range | 87.5 - 108 MHz | 531 - 1,602 kHz |
| Antenna terminals | West German model: 75 ohms, unbalanced Other models: 300 ohms, balanced 75 ohms, unbalanced | External antenna terminal, loop antenna |
| Intermediate frequency | 10.7 MHz | 450 kHz |
| Sensitivity at 46 dB quieting | 18.3 dBf, 4.5μV (mono) 38.3 dBf, 45μV (stereo) | — |
| Usable sensitivity | 11.2 dBf, 2μV (IHF) | Loop antenna: 50 dB/m (at 999 kHz) External antenna: 100μV (at 999 kHz) |
| Signal-to- noise ratio | 76 dB (mono) 70 dB (stereo) | 54 dB (at 50 mV/m) |
| Harmonic distortion | 0.1% (mono), 0.2% (stereo) at 1 kHz | 0.3% (at 50 mV/m, 400 Hz) |
| Selectivity | West German model: 60 dB at 300 kHz Other models: 50 dB at 300 kHz | 35 dB at 9 kHz |
| Separation | 45 dB at 1 kHz | |
| Frequency response | 40 Hz - 12.5 kHz ±0.5 dB | |
| IM distortion | 0.1% (mono) 0.2% (stereo) | |
| Capture ratio | 1.2 dB | |
| AM suppression ratio | 54 dB | |
| Image response ratio | West German model: 80 dB Other models: 60 dB | |
| IF response ratio | West German model: 93 dB Other models: 90 dB | |
| Spurious response ratio | 100 dB | |
| RF Intermodulation | 65 dB (800 kHz) | |
| Auto tuning threshoed | 30 dBf | |

**WARNING !!**

**ADVARSEL!**
Lithiumbatteri – Eksplosionsfare
Udskiftning må kun foretages af en sagkyndig, og som beskrevet i servicemanualen.

**LITHIUM BATTERY**

SHOULD ONLY BE CHANGED BY TECHNICAL PERSONNEL. THERE IS A RISK FOR EXPLOSION AT A WRONG HANDLING.

"Batteriet må kun udskiftes med et batteri af samme fabrikat og type".

Because of the risk for explosion the battery must be replaced with the same type and manufacture.

**General**

| | |
|---|---|
| System | Tuner section: PLL quartz-locked digital synthesizer system<br>Preamplifier section: low-noise NF type equalizer amp<br>Power amplifier section: quasi-complementary SEPP |
| Power requirements | US model: 120 V AC, 60 Hz<br>AEP model: 220 V AC, 50/60 Hz |
| Power consumption | 150 watts |
| AC outlets | Two switched (total 100 watts) |
| Dimensions | Approx. 430 x 130 x 370 mm (w/h/d) (17 x 5 1/8 x 14 1/2 inches) including projecting parts and controls |
| Weight | US model<br>Approx. 7.9 kg (17 lb 7 oz) net<br>Approx. 9.4 kg (20 lb 13 oz) shipping carton<br>AEP model<br>Approx. 8.4 kg (18 lb 9 oz) net<br>Approx. 9.9 kg (21 lb 14 oz) shipping carton |
| Accessaries supplied | FM ribbon antenna (for models other than the West German model) (1)<br>AM loop antenna (1)<br>Remote Commander RM-S60 (1)..... AEP model<br>Remote Commander RM-U80 (1)..... US model<br>Sony battery SUM-3(NS) (2) (for the remote commander) |

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

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# SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

## LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

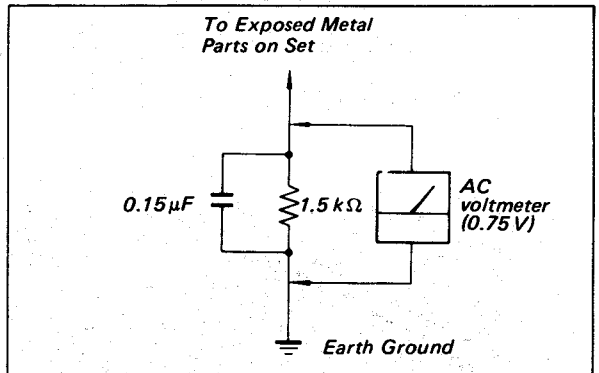
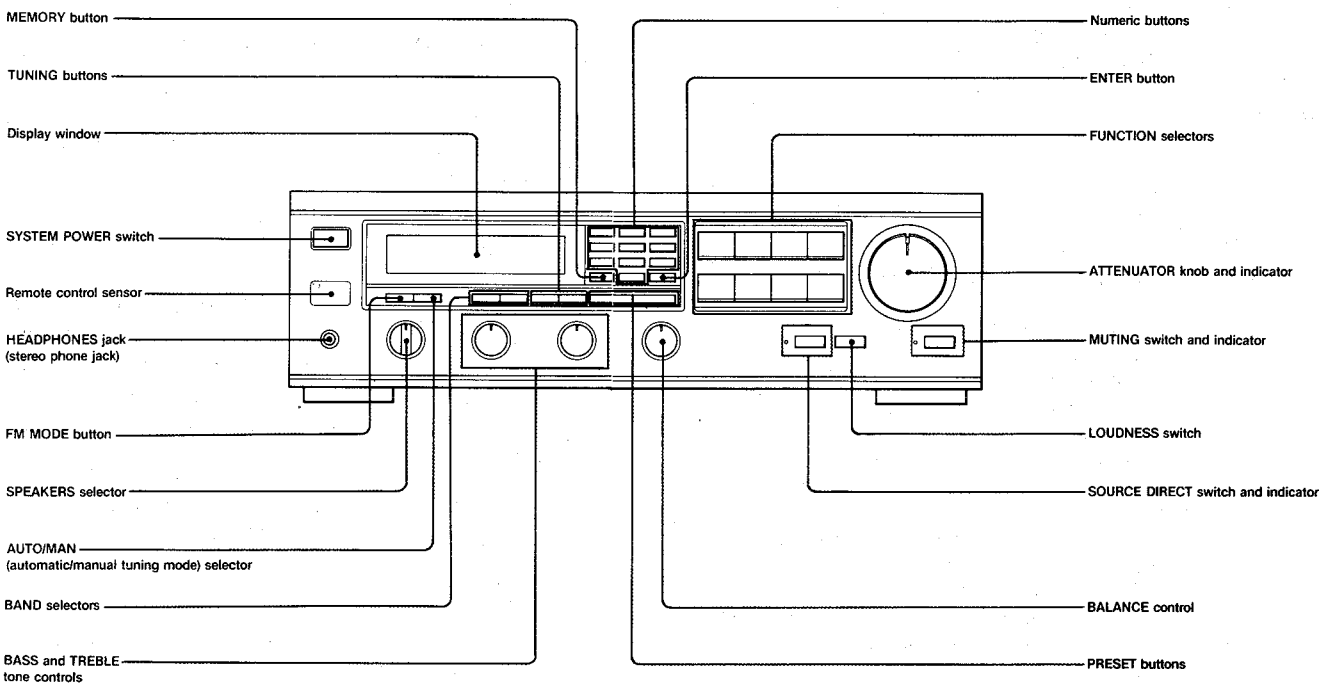


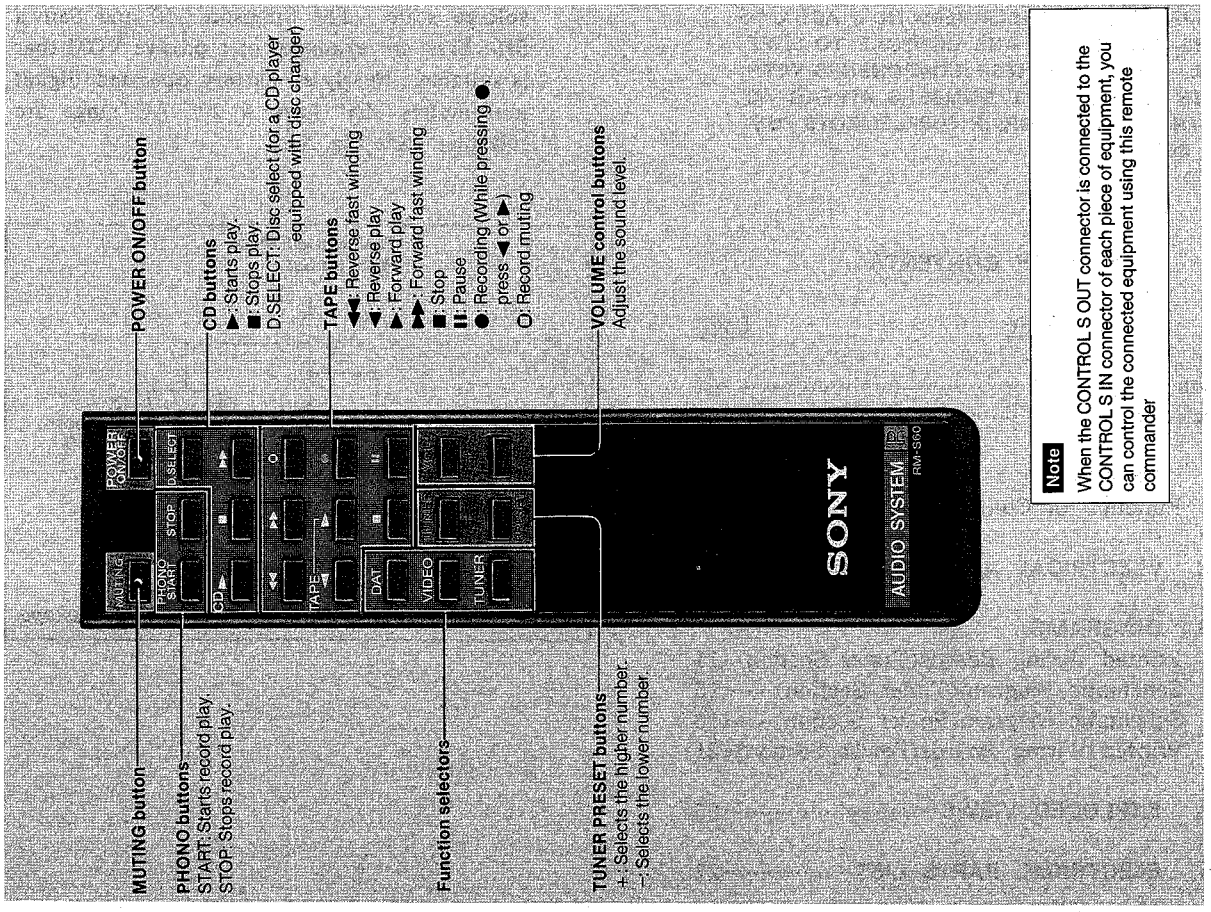

*Fig. A. Using an AC voltmeter to check AC leakage.*

# SECTION 1
# GENERAL

## 1-1. FUNCTION OF CONTROLS




## REMOTE COMMANDER RM-S60 (AEP model)


POWER ON/OFF button
CD buttons
▲: Starts play
■: Stops play
D.SELECT: Disc select (for a CD player equipped with disc changer)
TAPE buttons
▼: Reverse fast winding
Reverse play
▼: Forward play
▲: Forward fast winding
■: Stop
II: Pause
●: Recording (While pressing ●, press ▼ or ▲)
O: Record muting
VOLUME control buttons
Adjust the sound level
MUTING button
PHONO buttons
START: Starts record play
STOP: Stops record play
Function selectors
TUNER PRESET buttons
+: Selects the higher number
–: Selects the lower number
SONY
AUDIO SYSTEM
RM-S60
Note
When the CONTROL S OUT connector is connected to the CONTROL S IN connector of each piece of equipment, you can control the connected equipment using this remote commander

REMOTE COMMANDER RM-U80 (US model)

1 **POWER ON/OFF buttons**
**TV**: Turns the power of the TV on or off.
**VTR**: Turns the power of the VCR on or off.
**AUDIO**: Turns the power of the receiver on or off.

2 **Function selectors**

3 **INDEX select buttons**
(These buttons do not operate on the STR-GX5ES.)

4 **TV buttons**

5 **VTR CHANNEL buttons**
+ : Selects a higher-numberd channel.
– : Selects a lower-numberd channel.

6 **SYSTEM POWER OFF button**
Turns off the power of the receiver, TV and VCR.

7 **TAPE and VTR selector**
TAPE A: Selects the tape in a single-deck unit or the tape in the "A" deck of a double-deck unit.
TAPE B: Selects the tape in the "B" deck of a double-deck unit.
VTR1/2: If your VCR has a command mode selector, set this switch to the same position as that of the command mode selector.
If not, set this switch to VTR1.

8 **PHONO buttons**
START : Starts record play.
STOP : Stops record play.

9 **CD buttons**
▲: Starts play.
■: Stops play.
⏮/⏭: AMS (Automatic Music Sensor)
PGM : Program play.
D.SELECT : Disc select (for a CD player equipped with disc changer)
REPEAT : Repeat play.
SHUFFLE : Shuffle play.

10 **TAPE buttons**
⏬: Reverse fast winding
▼: Reverse play
▲: Forward play
⏫: Forward fast winding
■: Stop
⏸: Pause
●: Recording (While pressing ●, press ◀ or ▶.)
○: Record muting

11 **VTR buttons**
⏬: Rewind
▲: Play
⏫: Fast forward
TV/VTR : Selects the outlet signal from the VCR, either a TV signal or VCR programs.
■: Stop
⏸: Pause
●: To start recording (While pressing ●, press ▶.)

12 **SURROUND button**
(This button does not operate on the STR-GX5ES.)

13 **VOLUME control buttons**
Adjust the sound level.

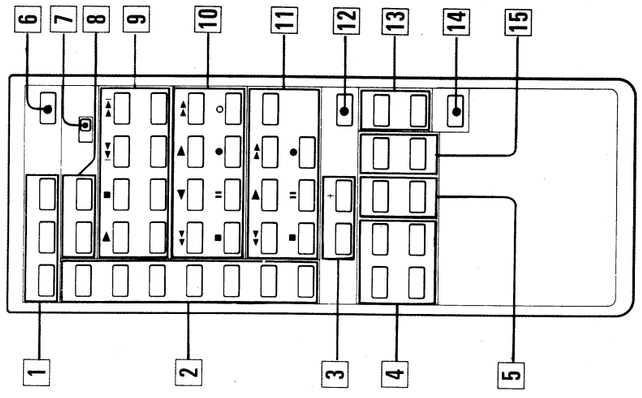
14 **MUTING button**

15 **TUNER PRESET buttons**
+ : Selects the higher number.
– : Selects the lower number.

**Notes**
- SHUFFLE and PGM modes of some CD players cannot be cleared by this remote commander. In such cases, clear the modes using the CD player itself or with the remote commander supplied with the CD player.
- When the CONTROL S OUT connector is connected to the CONTROL S IN connector of each piece of equipment, you can control the connected equipment using this remote commander

**Note on the ● (recording) button under 11 VTR buttons**
If your VCR is of such type as pressing ● puts it in REC PAUSE mode, first press ● on this commander and then ⏸.

**Note on the TAPE and VTR selector (7)**
The tape A/B selector on the commander is usable for TC-WR950.
If you use another double deck with "controlS", you can operate one side of the deck.

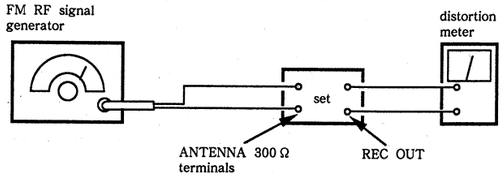




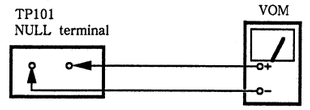

# SECTION 2
# ELECTRICAL ADJUSTMENTS

## FM DISCRIMINATOR ALIGNMENT
## (NULL and MONO Distortion)

**Setting :**



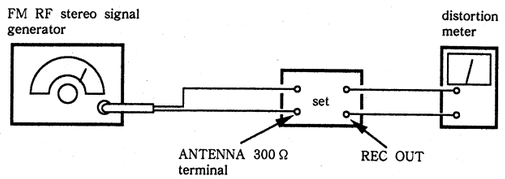

Carrier frequency : 98MHz
Modulation : 400Hz, 75kHz deviation (US MODEL) (100%)
400Hz,40kHz deviation (AEP,WG MODEL) (100%)
Output level : 1mV (60dB)




**Procedure :**
1. Tune the set to 98MHz.
2. Sdjust the T101 for 0V reading on VOM.·····NULL
3. Adjust T102 for a minimum reading on the distortion meter. ····· MONO Distortion.
4. Repeat the primary-side and secondary-side alignments several times.

## FM METER ADJUSTMENT

**Setting :**

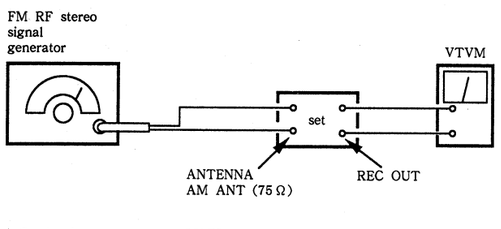



Carrier frequency : 98MHz
Output level : 50 μ V (45dB)
Modulation
Audio 400Hz : 33.75kHz deviation (45%)
Sub channel 38kHz : 33.75kHz deviation (45%)
Pilot signal 19kHz : 7.5kHz deviation (19%)

**Procedure :**
Adjust the RT103 so that the 5 point segments of the signal meter goes on.

## FM Stereo Separation Adjustment

**Setting :**




Carrier frequency : 98MHz
Output level : 1mV (60dB)
Modulation :
Audio 1kHz : 33.7kHz deviation (45%)
Sub channel 38kHz : 33.75kHz deviation (45%)
Pilot signal 18kHz : 7.5kHz deviation (10%)
Mode : stereo

**Procedure :**
Tune the set to 98MHz

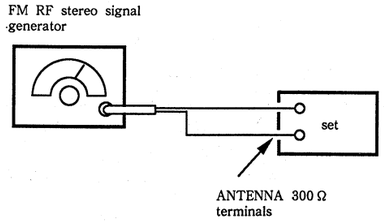
| FM stereo signal generator output channel | VTVM connection | VTVM reading (dB) |
|---|---|---|
| L-CH | L-CH | Ⓐ |
| R-CH | L-CH | Ⓑ Adjust RT104 for minimum reading. |
| R-CH | R-CH | Ⓒ |
| L-CH | R-CH | Ⓓ Adjust RT104 for minimum reading. |

L-CH Stereo separation : Ⓐ - Ⓑ
R-CH Stereo separation : Ⓒ - Ⓓ

The separations of both channels should be equal.

## FM TUNING STOP LEVEL ADJUSTMENT

**Setting :**



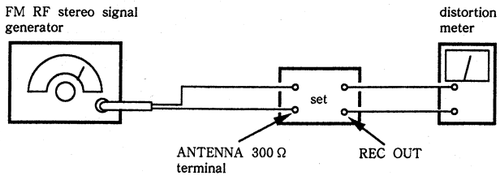

Carrier frequency : 98MHz (25dB)
Output level : 17.8 μ V
Modulation
Audio 400Hz : 33.75kHz deviation (45%)
Sub channel 38kHz : 33.75kHz deviation (45%)
Pilot signal 19kHz : 7.5kHz deviation (10%)

**Procedure :**
1. Tune the set to 98MHz by pressing the TUNING buttons.
2. Adjust RT102 so that the STEREO (FLT) goes on.

# TION 2
# . ADJUSTMENTS

## FM METER ADJUSTMENT

**Setting :**



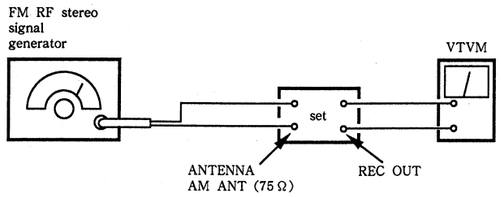

| | |
|---|---|
| Carrier frequency : | 98MHz |
| Output level : | 50 μ V (45dB) |
| Modulation | |
| Audio 400Hz : | 33.75kHz deviation (45%) |
| Sub channel 38kHz : | 33.75kHz deviation (45%) |
| Pilot signal 19kHz : | 7.5kHz deviation (19%) |

**Procedure :**

Adjust the RT103 so that the 5 point segments of the signal meter goes on.

## FM Stereo Separation Adjustment

**Setting :**




| | |
|---|---|
| Carrier frequency : | 98MHz |
| Output level : | 1mV (60dB) |
| Modulation : | |
| Audio 1kHz : | 33.7kHz deviation (45%) |
| Sub channel 38kHz : | 33.75kHz deviation (45%) |
| Pilot signal 18kHz : | 7.5kHz deviation (10%) |
| Mode : | stereo |

**Procedure :**

Tune the set to 98MHz

| FM stereo signal generator output channel | VTVM connection | VTVM reading (dB) |
|---|---|---|
| L-CH | L-CH | Ⓐ |
| R-CH | L-CH | Ⓑ Adjust RT104 for minimum reading. |
| R-CH | R-CH | Ⓒ |
| L-CH | R-CH | Ⓓ Adjust RT104 for minimum reading. |

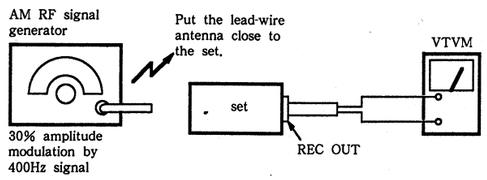
L-CH Stereo separation : Ⓐ - Ⓑ
R-CH Stereo separation : Ⓒ - Ⓓ

The separations of both channels should be equal.



## AM SECTION

**Setting :**




## AM IF ADJUSTMENT

**Procedure :**

1. Tune the set to the SG signal.
2. Adjust for a maximum reading on VTVM.

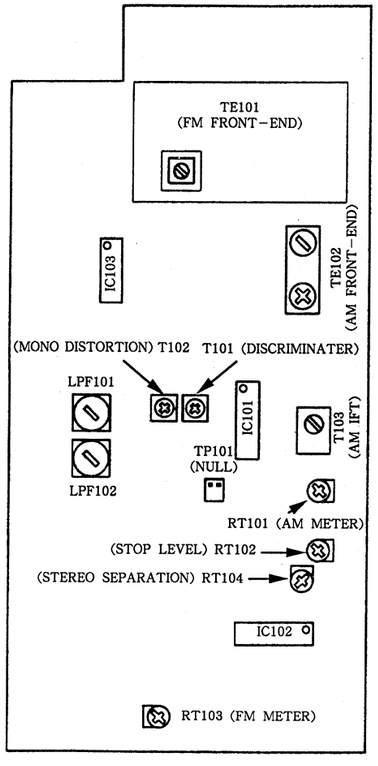
| | SG and set frequency | Adjustment parts | Reading on VTVM |
|---|---|---|---|
| 1. | 1400kHz | T103 | Maximum |

## AM METER ADJUSTMENT

**Procedure :**

1. Tune the set to 999kHz (70dB)
2. Adjust the RT101 so that the 4 point segment of the signal meter goes on.

**【TUNER BOARD】** (CONPONENT SIDE)






## AUDIO SECTION

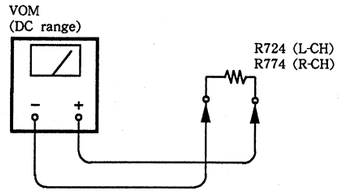
**Note :**

1. DC BIAS and DC BALANCE adjustments should be made several minutes after the POWER switch is turned on (POWER ON).
2. Make DC BIAS adjustment first.
3. Repeat DC BIAS and DC BALANCE adjustments two or three times.
4. After replacing the power transistors, DC BIAS and DC BALANCE adjustments should be made.

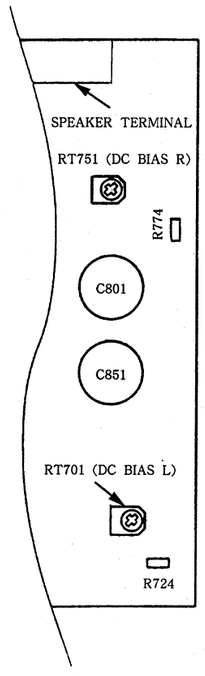
## DC Bias Adjustment (with no signal input)

**Procedure :**

−L-CH−
Adjust RT701 for 5mV readings.
−R-CH−
Adjust RT751 for 5mV readings.




**【POWER BOARD】** (CONPONENT SIDE)



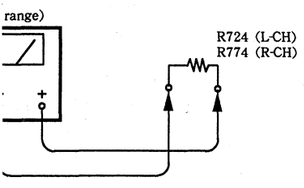
ON

DC BALANCE adjustments should be made
tes after the POWER switch is turned on
).
AS adjustment first.
BIAS and DC BALANCE adjustments two
es.
ng the power transistors, DC BIAS and DC
djustments should be made.

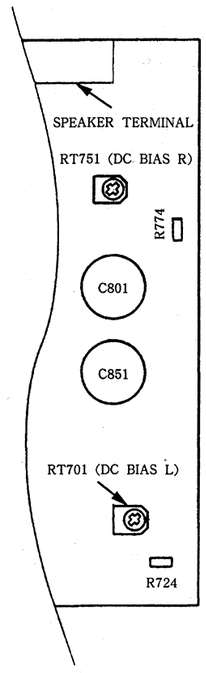
**ment (with no signal input)**

r 5mV readings.

r 5mV readings.




D] (CONPONENT SIDE)

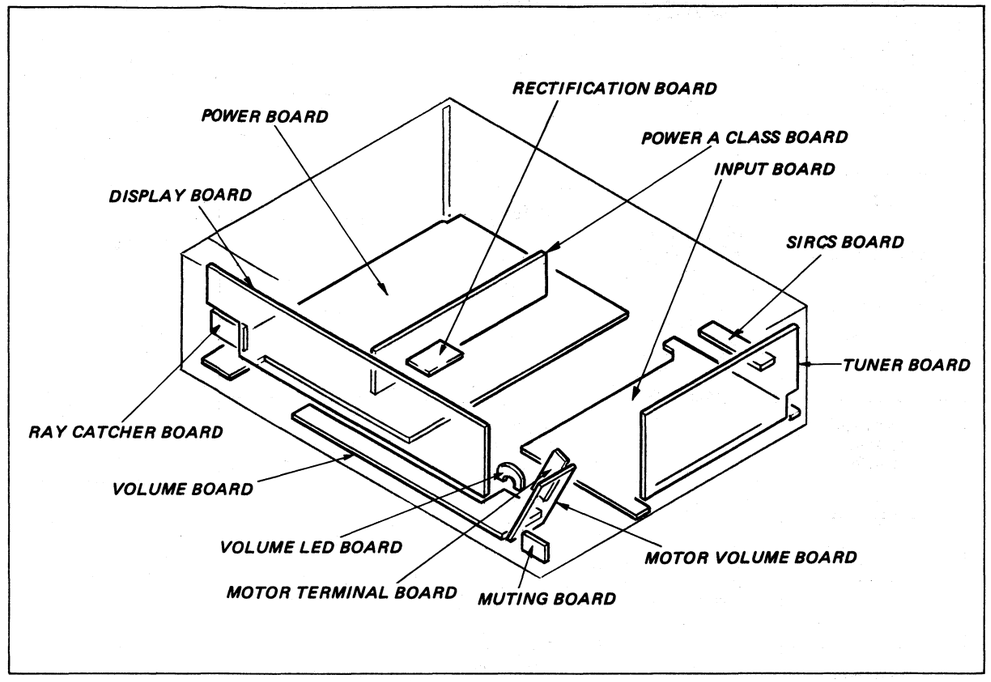







# SECTION 3
# DIAGRAMS

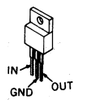
**PRINTED CIRCUIT BOARD LOCATION**



## ● Semiconductor Lead Layouts

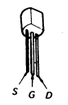
**LA1266**

**M5F78M15**
**M5F79M15**

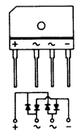



**2SA988F**

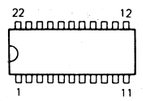
**2SK30AGR33**



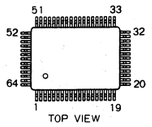

**RBV-602-01**



**LA3401**

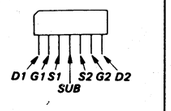



**HD614042FH46**
**μPD75216AGF**
**-513-3BE**



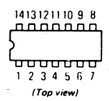

**2SC3622A-L**

**2SK389-GR**

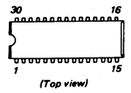



**TL0223**

**CX7925B**
**CX770A**
**LC4966**

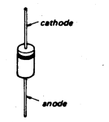



**LC7822**

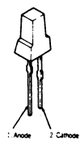



**2SC3112**
**2SC1841-PA**

**US1060M**
**HZ4ALL**
**RD5.6F-B2**

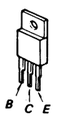



**SEL1810W**



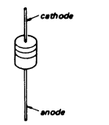

**LB1493**

**2SD2012**

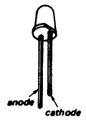



**2SA1175**
**2SC2785-E**
**BN1A3Q**

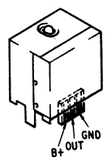
**HZS6C3L**
**HZS30-1L**



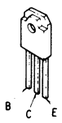

**SEL2510W**



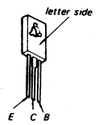

**SBX1492-51**



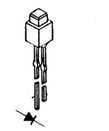

**2SA1491**
**2SC3855**



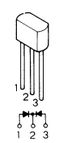

**2SA1142**
**2SC2682**




**MC921**



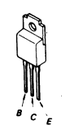
**GL8PR48**
**(AEP, WG)**



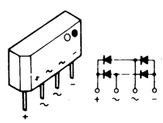

**LB1639**

**2SC2724-C**
**DTA124ES**
**DTC124ES**
**DTC144ES**

**2SA1684**
**2SC4431**




**S1VB10-S**
**S1VB40**



**M5219L**

STR-GX5ES

## ● SEMICONDUCTOR LOCATION

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D101 | C-3 | Q101 | G-4 |
| D102 | C-3 | Q102 | G-4 |
| D103 | D-5 | Q103 | G-4 |
| D104 | G-3 | Q104 | G-4 |
| D105 | F-2 | Q106 | D-2 |
| D201 | E-14 | Q107 | H-2 |
| D501 | B-9 | Q108 | H-2 |
| D502 | C-9 | Q109 | G-3 |
| D503 | E-7 | Q110 | G-3 |
| D504 | C-10 | Q111 | F-3 |
| D505 | C-8 | Q201 | E-14 |
| D506 | D-9 | Q202 | E-15 |
| D601 | A-21 | Q405 | C-11 |
| D602 | E-22 | Q406 | B-11 |
| D701 | I-23 | Q407 | B-11 |
| D702 | I-23 | Q408 | D-10 |
| D703 | I-23 | Q409 | E-8 |
| D704 | H-22 | Q457 | B-12 |
| D705 | H-22 | Q458 | E-10 |
| D706 | I-22 | Q701 | H-23 |
| D707 | I-22 | Q702 | H-23 |
| D751 | H-17 | Q703 | H-23 |
| D752 | H-18 | Q704 | H-23 |
| D753 | I-17 | Q705 | I-23 |
| D754 | H-16 | Q706 | H-22 |
| D755 | H-16 | Q707 | H-22 |
| D756 | I-16 | Q708 | I-22 |
| D757 | I-16 | Q751 | H-17 |
| IC101 | F-4 | Q752 | H-17 |
| IC102 | C-4 | Q753 | H-17 |
| IC103 | G-3 | Q754 | H-18 |
| IC401 | H-7 | Q755 | I-17 |
| IC404 | G-9 | Q756 | H-16 |
| IC405 | C-11 | Q757 | H-16 |
| IC406 | B-10 | Q758 | I-16 |
| IC407 | G-8 | | |
| IC408 | B-8 | | |
| IC409 | B-7 | | |
| IC501 | D-8 | | |

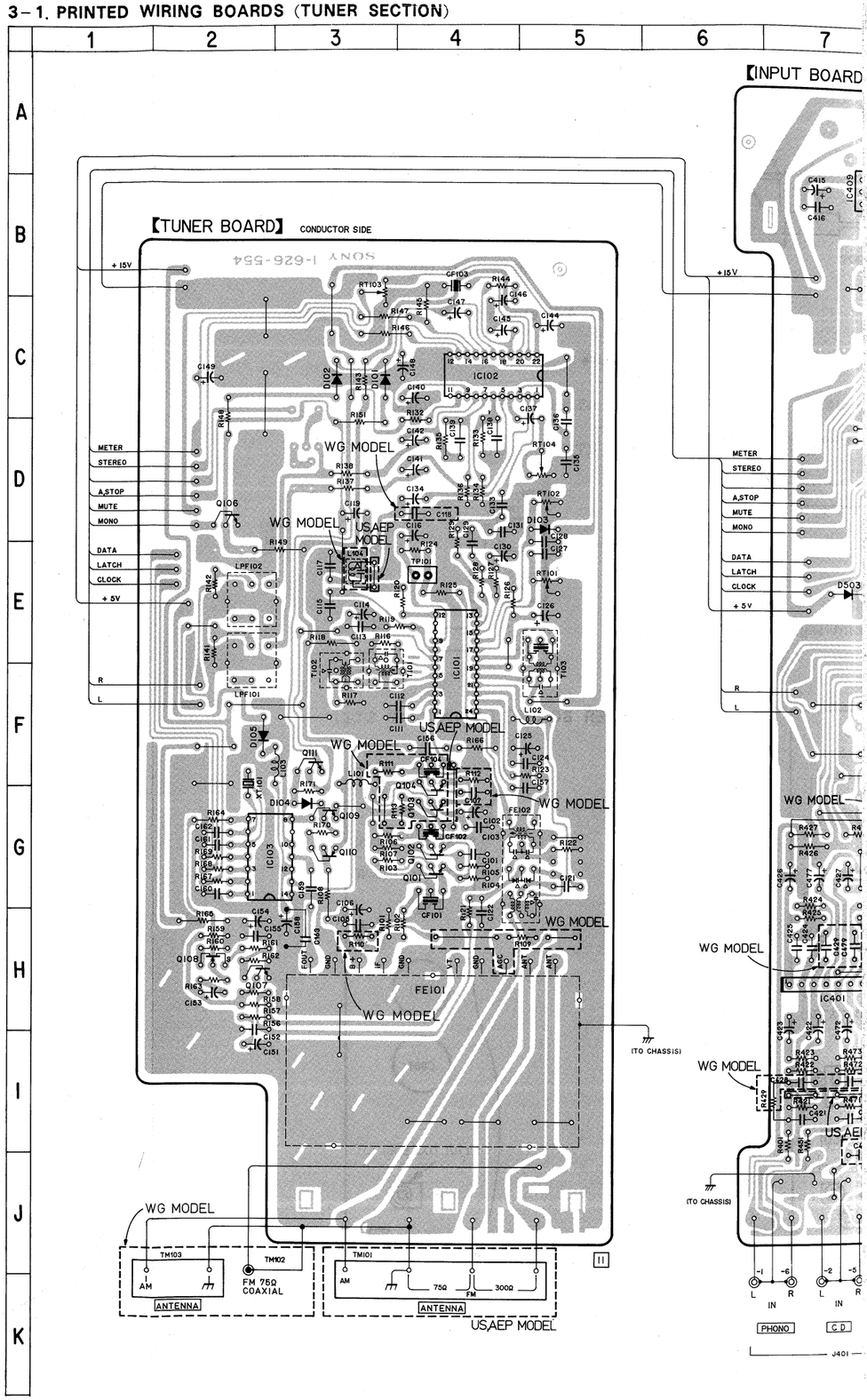
**Note:**

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ⊢ : indicates side identified with part number.
- ○—●—○ : Jumper wire connected to the ground pattern on the component side.
- ▒▒ : Pattern on the side which is seen.



STR-GX5ES

## 3-1. PRINTED WIRING BOARDS (TUNER SECTION)



## 1. PRINTED WIRING BOARDS (TUNER SECTION)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

【TUNER BOARD】 CONDUCTOR SIDE

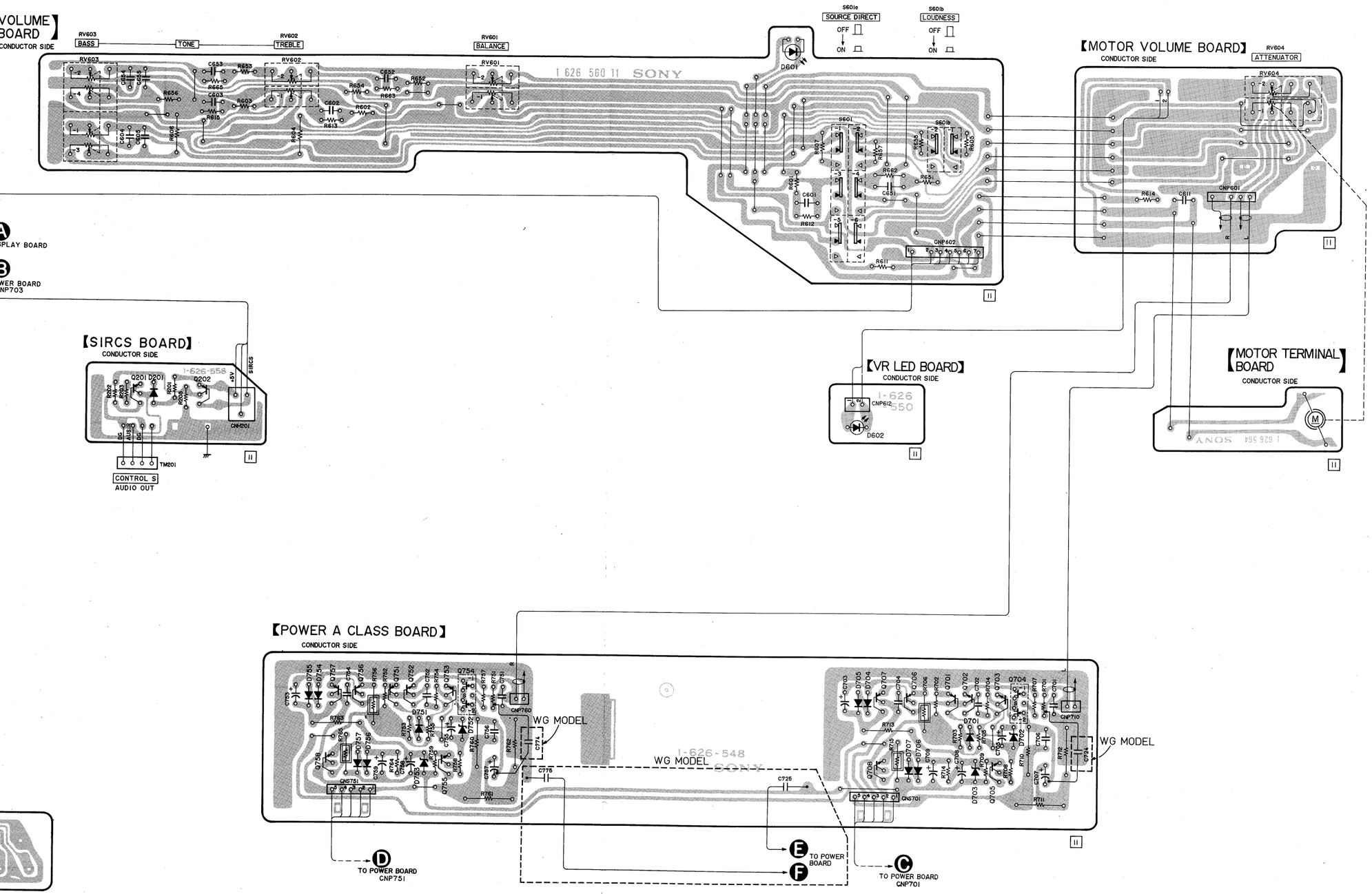
【INPUT BOARD】 COMPONENT SIDE

【VOLUME BOARD】 CONDUCTOR SIDE

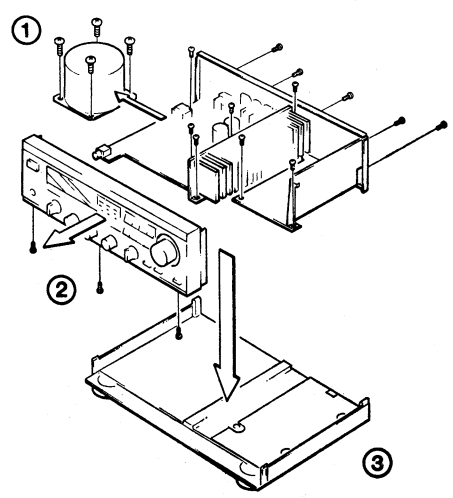
【SIRCS BOARD】 CONDUCTOR SIDE

【POWER A CLASS BOARD】 CONDUCTOR SIDE

13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



- Disassemble in the numerical order.
- Connect the ground of the board with the metallic portion of the back panel after board removal.




**Note:**

- * A*B: See page 18, 19 Note on Ceramic Filter (CF101, 102, 104) Replacement.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ⊣W⊢ : nonflammable resistor.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

**• Switch**

| Ref. No. | Switch | Position |
|---|---|---|
| S601a | SOURCE, DIRECT | OFF |
| S601b | LOUDNESS | OFF |
| S701 | SPEAKERS | OFF |
| S301-S331 | KEY BOARD SWITCH | OFF |

- B+ : B+ Line
- B− : B− Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark: FM
  [ ] : AM
- Voltages are taken with a VOM (50 kΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

8 9 10 11 12 13 14 15 16 17 18

A B C D E F G H I J K L M N O P

US,AEP MODEL

Q103,Q104 2SC2724
FM IF AMP 2

RT102
STOP LEVEL

RT103
FM METER

RT101
AM METER

WG MODEL

IC102
LA3401
FM MPX
AM AMP

RT104
ST SEPARATION

C138,C139
560p US MODEL
390p AEP,WG MODEL

WG MODEL

US,AEP MODEL

Q109 BA1FAM
Q110 2SA1175
Q111 2SC2785
FM SWITCH

Q106
BA1F4M
MONO SWITCH

B+

+15V G L R METER STEREO HI-BLEND A.STOP MUTE MONO DATA LATCH CLOCK +5V

IC501
HD614042 FH46
CONTROLER

A. STOP
HI-BLEND
VOL (+)
VOL (-)
MUT (-20db)
MUT (FUNC)
SP-RY
PROTECT
POW-RY

1.4Vp-p
0.26μs

DAT -15V STOP CLK LAT DATA

+B(15V)
RESET
-B(-15V)
G
STOP
+5V
PROTECT
SP-RY
POW-RY

TO POWER BOARD CNP703

AEP,WG MODEL

US MODEL

IC404
LC7822
INPUT SELECTOR
Q458,Q408
2SC3622A
SOUND MUTE

IC406
LB1639
VOLUME MOTOR DRIVE

IC405
CX-770A
ATT SWITCH

Q407,Q457
2SC3622A
SOUND MUTE

IC408
M5F78M15
V REG

IC409
M5F79M15
V REG

G
MOTOR
MOTOR
+15V
L
G
R

【POWER A CLASS BOARD】

Q701,Q751
2SA1175
CURRENT MIRROR

Q702,Q703,Q752,Q753
2SC2785
CASCADE

Q704,Q754
2SK389
Q705,Q708,Q755,Q758
2SC2682
REGULATOR

Q706,Q756
2SA1175
Q707,Q757
2SA1142
CLASS-A CASCADE

B+ B−

C704 3p 100V US,AEP MODEL
18p 500V WG MODEL

TO POWER BOARD CNP701

C725 0.003
TO POWER BOARD
WG MODEL

C754 3p 100V US,AEP MODEL
18p 500V WG MODEL

TO POWER BOARD CNP751

C756 0.003
TO POWER BOARD
WG MODEL

【VOLUME BOARD】

RV601
BALANCE

RV602
TREBLE

TONE

RV603
BASS

RV603
1M×2
500K×2

S601a
SOURCE DIRECT
ON
OFF

S601b
LOUDNESS
ON
OFF

RV604
ATTENUATOR

RV604
120k ×2

MOTOR-UP
MOTOR-DOWN
+15V
G

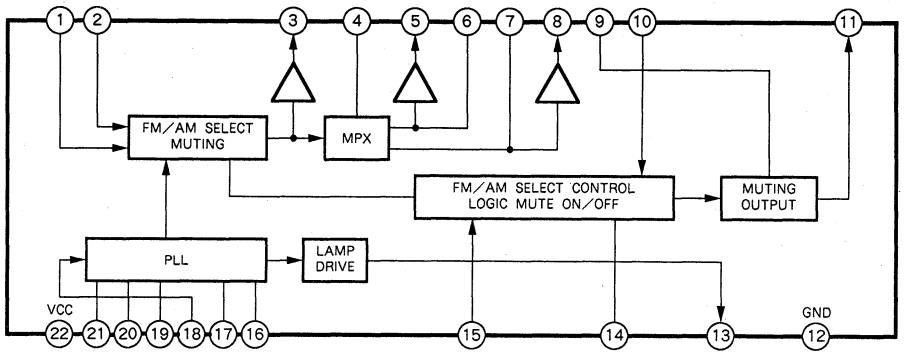
【VR LED BOARD】

【MOTOR TERMINAL BOARD】

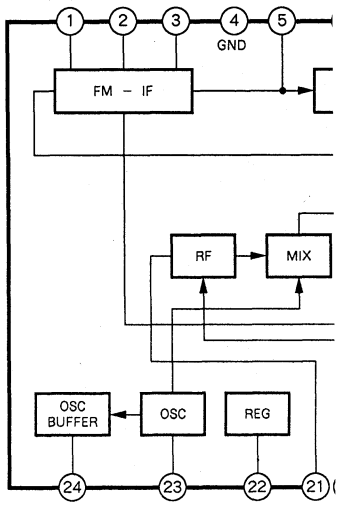
【MOTOR VOLUME BOARD】

## IC BLOCK DIAGRAM

### LA3401

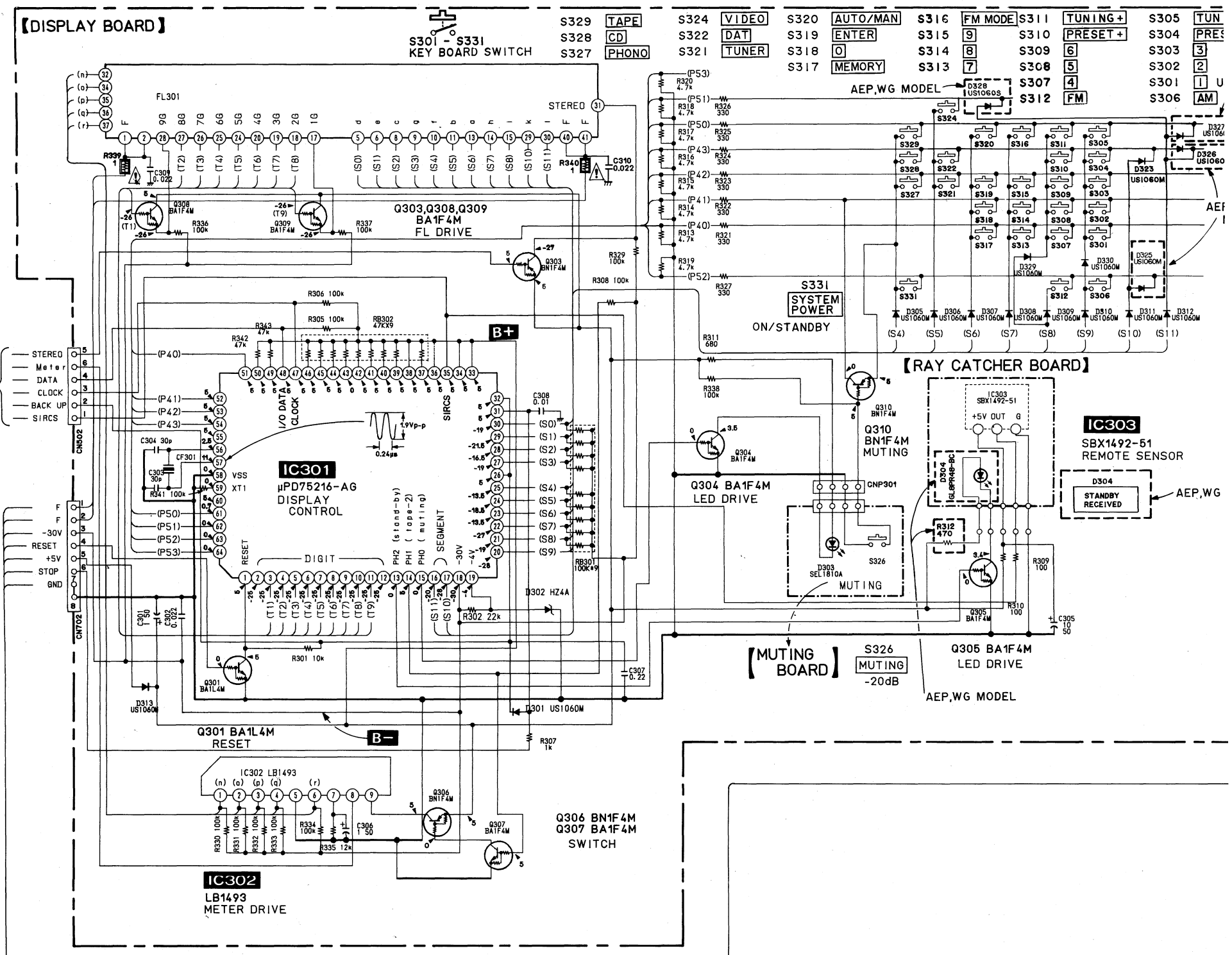



### LA1266



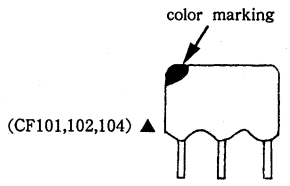

## 3-3. SCHEMATIC DIAGRAM (POWER SECTION)

● See page 15 for note.




### Note on Ceramic Filter (CF101,102,104) ▲Replacement.

This set employs tow ceramic filters (CF101,102,104) ▲ which should have the same color marking to identify their center frequency.Therefore FM IF offset adjustment by IC501 ㊴ PIN,㊵ PIN connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



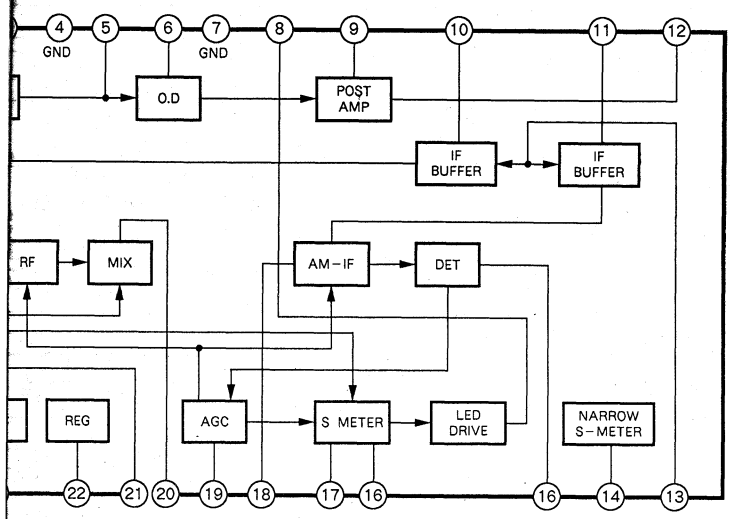

○ : conn
× : not

| Ceramic filter | | Connection | | FM |
|---|---|---|---|---|
| Color mark | Center frequency (MHz) | *A IC501 ㊴ PIN | *B IC501 ㊵ PIN | |
| White | 10.750 | × | × | |
| Red | 10.700 | ○ | ○ | |
| Black | 10.650 | × | ○ | |

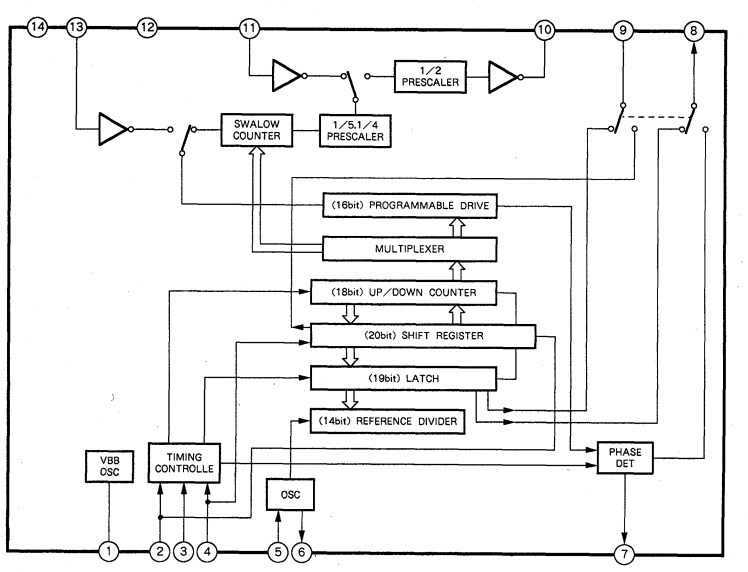
FM intermediate frequency is determined types as shown above.Ceramic filters of frequency,i.e., of same color coding should be u ,CF102 and CF104.

When replacing the ceramic filters,perfo Discriminator Adjustment.

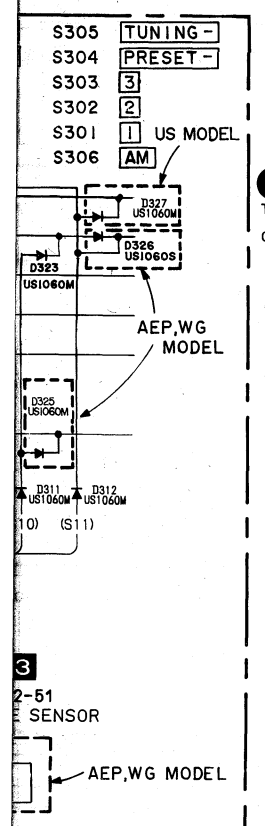
▲ : US, AEP MODEL—CF101,102
WG NODEL—CF101,102,104

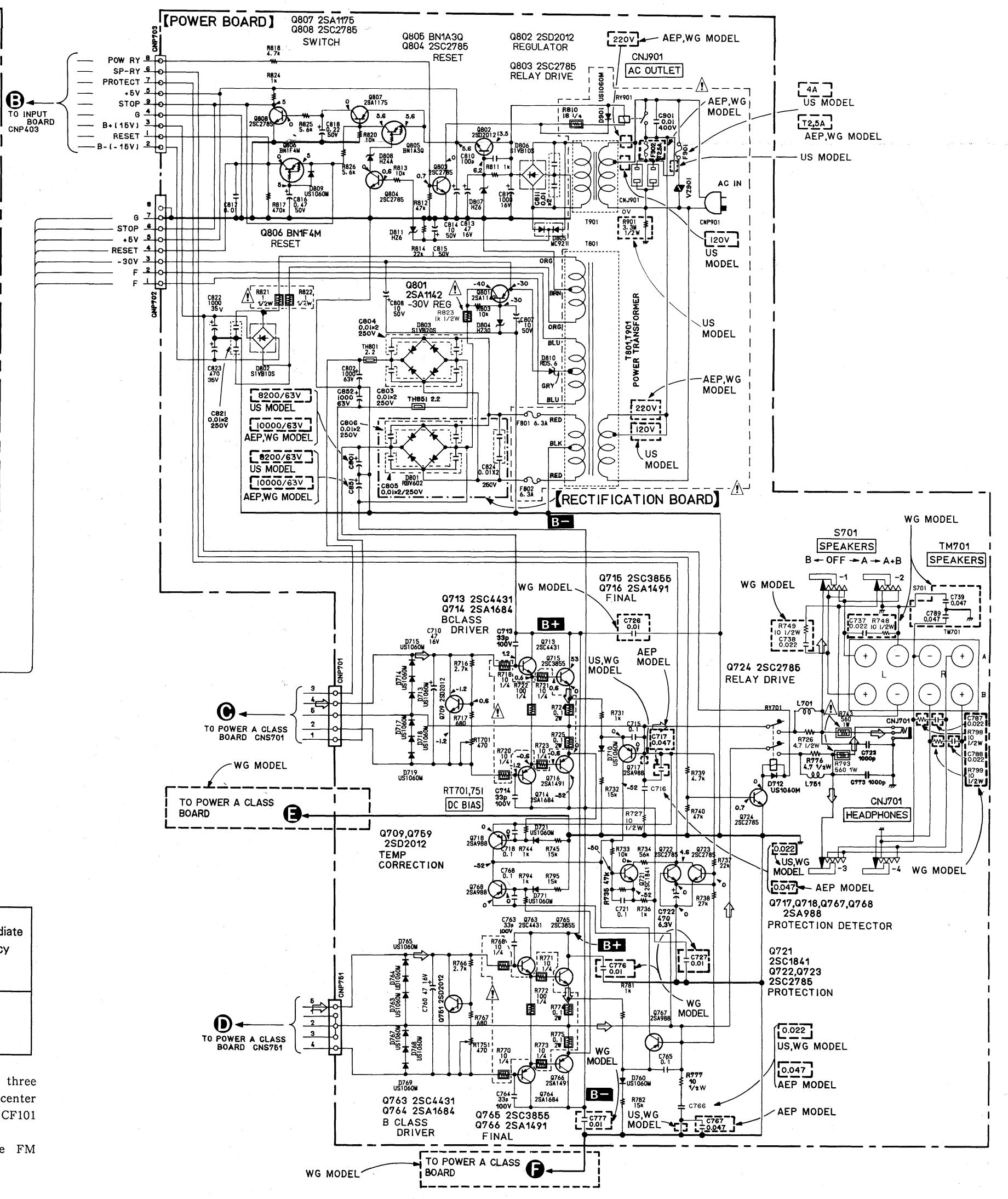



CX7925B




11 12 13 14 15 16 17 18 19 20 21 22




○ : connect
× : not connect

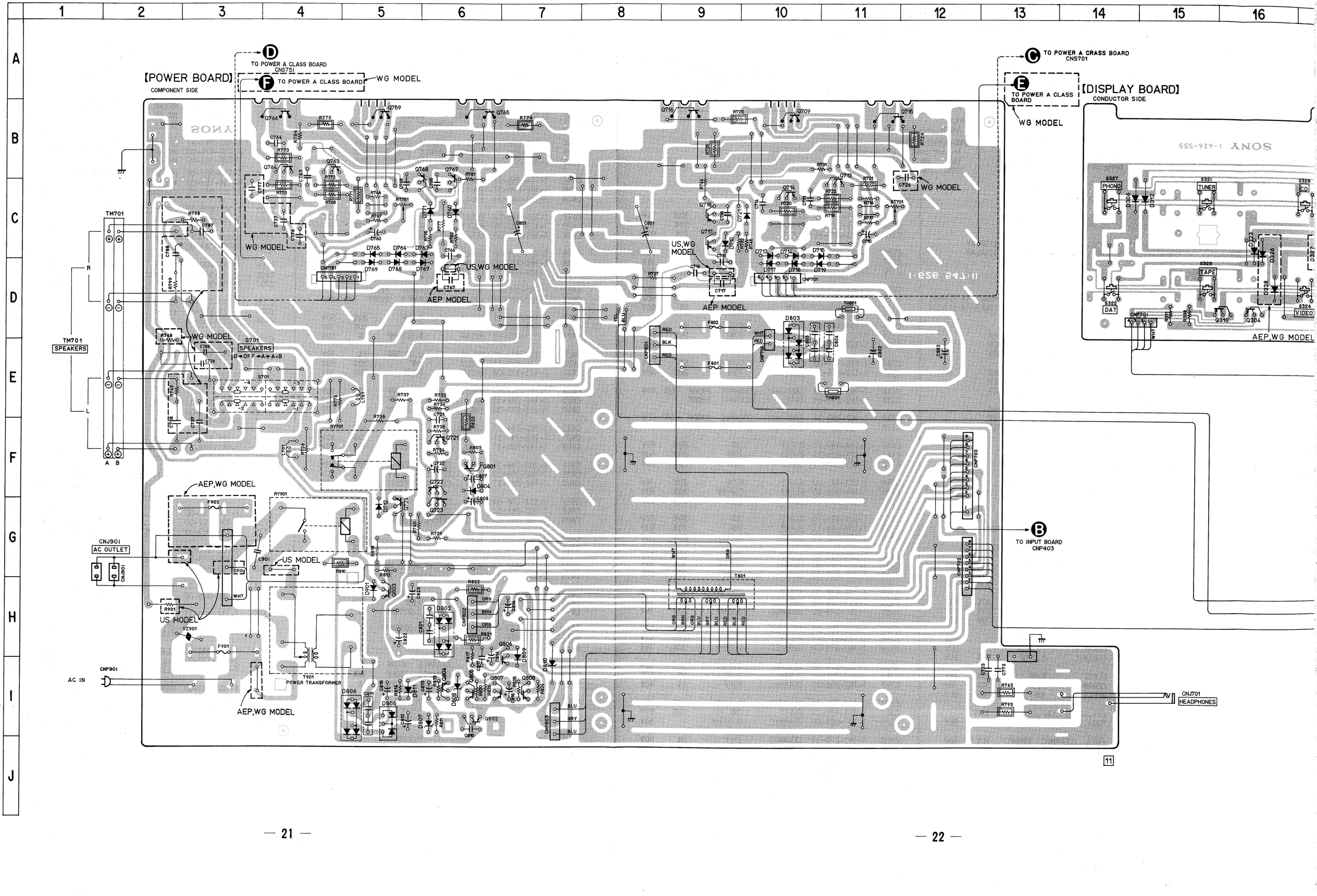
| nection | | FMintermediate frequency (MHz) |
|---|---|---|
| | *B IC501 ㊵ PIN | |
| | × | 10.750 |
| | ○ | 10.700 |
| | ○ | 10.650 |

is determined by the three
nic filters of same center
ing should be used for CF101

ic filters, perform the FM

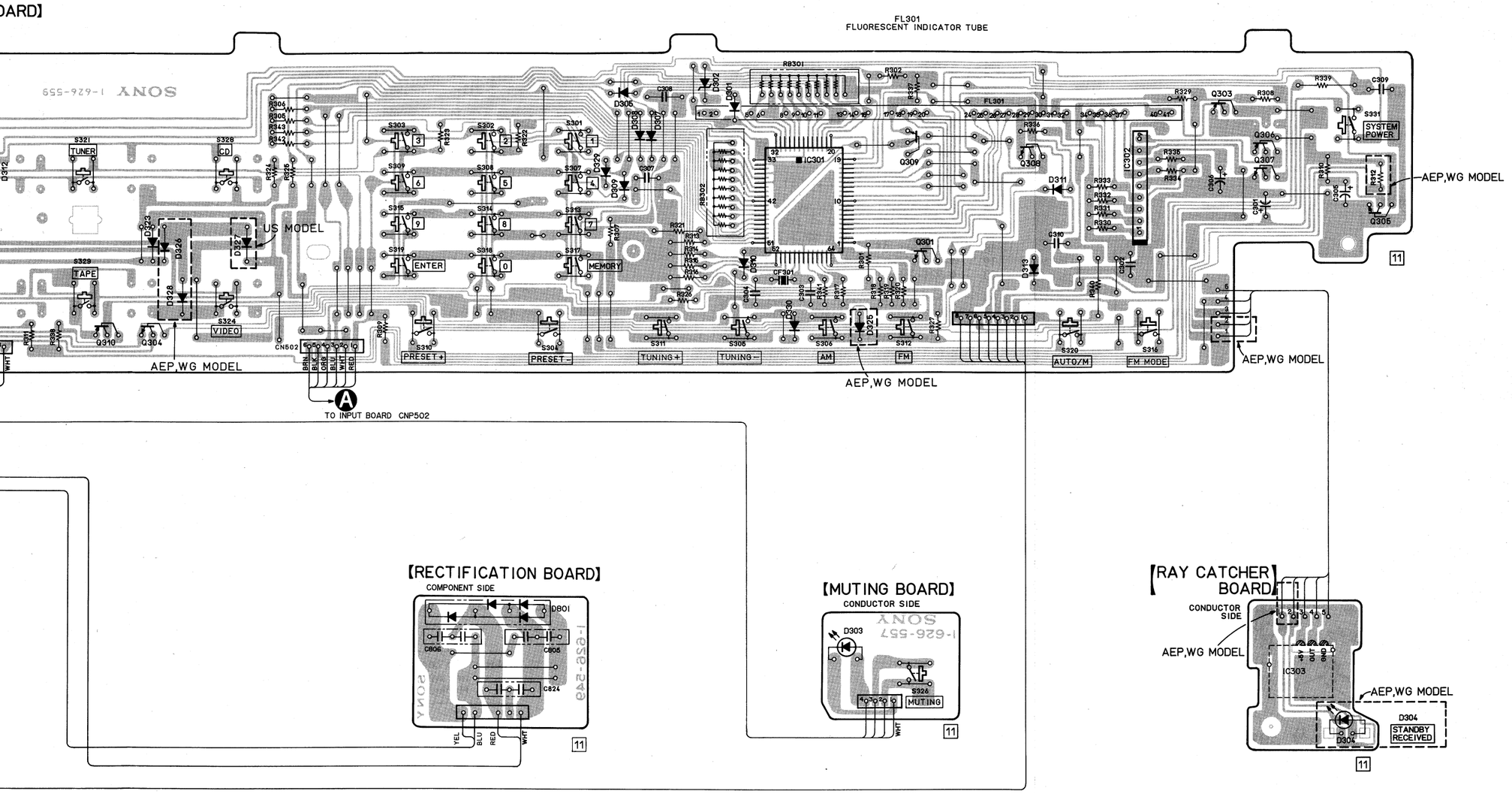
102
04

## 3-4. PRINTED WIRING BOARDS (POWER SECTION)



15 16 17 18 19 20 21 22 23 24 25 26 27

BOARD]




【RECTIFICATION BOARD】




【MUTING BOARD】




【RAY CATCHER BOARD】




## ● SEMICONDUCTOR LOCATION

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D301 | B-21 | D808 | I-6 |
| D302 | B-21 | D809 | H-7 |
| D303 | G-22 | D810 | I-7 |
| D304 | H-26 | D811 | I-5 |
| (AEP,WG) | | D901 | H-5 |
| D305 | B-20 | | |
| | | IC301 | C-21 |
| D306 | C-14 | IC302 | C-25 |
| D307 | B-20 | IC303 | G-26 |
| D308 | B-20 | | |
| D309 | C-20 | Q301 | D-23 |
| D310 | D-21 | Q303 | B-25 |
| | | Q304 | D-16 |
| D311 | C-24 | Q305 | C-27 |
| D312 | C-15 | Q306 | C-26 |
| D313 | D-24 | | |
| D323 | C-16 | Q307 | C-26 |
| D326 | C-6 | Q308 | C-24 |
| (AEP,WG) | | Q309 | C-23 |
| | | Q310 | D-16 |
| D327 | C-17 | Q709 | B-10 |
| (US) | | | |
| D328 | D-16 | Q713 | C-11 |
| (AEP,WG) | | Q714 | C-10 |
| D329 | C-20 | Q715 | B-11 |
| | | Q716 | B-9 |
| D330 | D-22 | Q717 | C-9 |
| D710 | C-9 | | |
| D712 | G-5 | Q718 | C-9 |
| D713 | C-10 | Q721 | F-6 |
| D714 | C-10 | Q722 | F-6 |
| | | Q723 | G-6 |
| D715 | C-10 | Q724 | G-5 |
| D717 | D-10 | | |
| D718 | D-10 | Q759 | B-5 |
| D719 | D-10 | Q763 | B-4 |
| D721 | C-10 | Q764 | B-4 |
| | | Q765 | B-6 |
| D760 | C-6 | Q766 | B-4 |
| D763 | C-6 | | |
| D764 | C-5 | Q767 | B-6 |
| D765 | C-5 | Q768 | B-5 |
| D767 | D-6 | Q801 | F-6 |
| | | Q802 | I-6 |
| D768 | D-5 | Q803 | H-5 |
| D769 | D-5 | | |
| D771 | C-6 | Q804 | I-6 |
| D801 | G-19 | Q805 | I-6 |
| D802 | H-6 | Q806 | I-7 |
| | | Q807 | I-6 |
| D803 | D-10 | Q808 | I-7 |
| D804 | F-6 | | |
| D805 | I-5 | | |
| D806 | I-5 | | |
| D807 | I-6 | | |

**Note:**

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- [ ]→ indicates side identified with part number.
- ○—●—○ : Jumper wire connected to the ground pattern on the component side.
- ▒▒ : Pattern on the side which is seen.

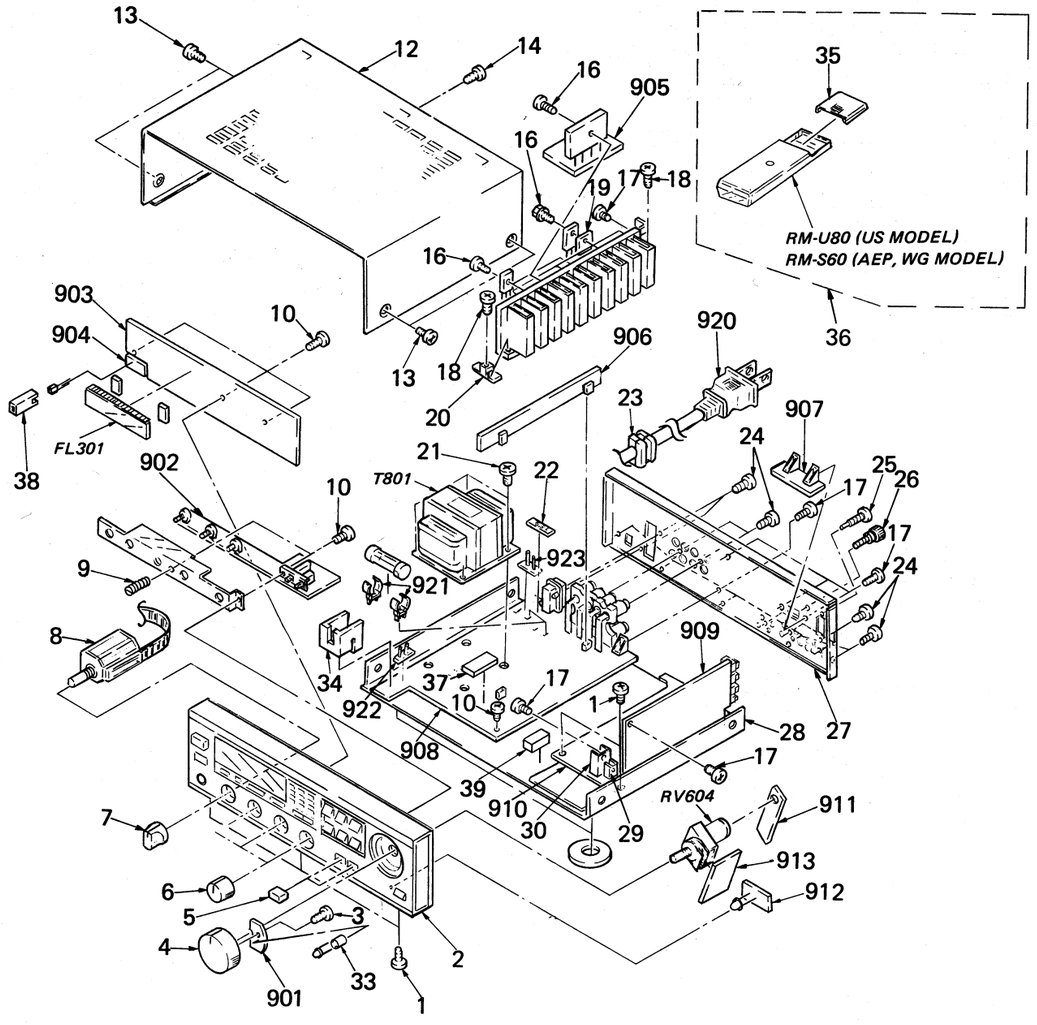
# SECTION 4
# EXPLODED VIEWS

**NOTE:**

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

WG : West Germany




| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S | |
| 2 | X-4924-902-1 | (US).....PANEL ASSY | |
| | X-4924-907-1 | (AEP,WG)...PANEL ASSY | |
| 3 | 7-685-534-19 | SCREW +BTP 2.6X8 TYPE2 N-S | |
| 4 | 4-925-121-01 | KNOB (V2) | |
| 5 | 4-924-901-01 | BUTTON (M) | |
| 6 | 4-916-746-01 | KNOB (DIA.21) | |
| 7 | 4-916-745-01 | KNOB (DIA.21) | |
| 8 | 1-571-512-11 | SWITCH, ROTARY SLIDE | |
| 9 | 3-307-108-00 | SPRING, COMPRESSION | |
| 10 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 N-S | |
| 12 | 4-924-920-41 | CASE | |
| 13 | 3-704-366-01 | SCREW (CASE) (M3X8) | |
| 14 | 3-703-685-21 | SCREW (+BV 3X8) | |
| 16 | 7-682-550-09 | SCREW +B 3X12 | |
| 17 | 7-682-548-04 | SCREW +BVTT 3X8 (S) | |
| 18 | 4-924-966-01 | SCREW, TAPPING +BV 3X20 | |
| 19 | 4-911-232-01 | SHEET, INSULATING | |
| 20 | 4-924-916-01 | BUSHING | |
| 22 | 3-701-946-28 | (US).....LABEL, FUSE | |
| | 3-701-947-15 | (AEP,WG)...LABEL, FUSE | |
| 23 | *3-703-244-00 | BUSHING (2104), CORD | |
| 24 | 4-924-965-01 | SCREW, TAPPING +B 3X8 | |
| 25 | 4-887-711-11 | SCREW, TERMINAL, CLAW, + BVTP | |
| 26 | *3-706-165-00 | SCREW | |
| 27 | *4-924-905-21 | (US)....PANEL, BACK | |
| | *4-924-905-31 | (AE1)...PANEL, BACK | |
| | *4-924-905-41 | (AE2)...PANEL, BACK | |
| | *4-924-905-51 | (WG)....PANEL, BACK | |
| 28 | *X-4924-904-1 | (US).....CHASSIS ASSY | |
| | *X-4924-908-1 | (AEP,WG)...CHASSIS ASSY | |
| 29 | *3-309-144-21 | HEAT SINK | |
| 30 | *4-880-403-11 | HEAT SINK | |
| 33 | *4-911-676-01 | SPACER, LED | |
| 34 | *4-924-956-01 | BRACKET (HP) | |
| 35 | 2-394-123-01 | COVER, BATTERY | |
| 36 | 1-463-986-11 | (US).....REMOTE COMMANDER (RM-U80) | |
| | 1-463-987-11 | (AEP,WG)...REMOTE COMMANDER (RM-S60) | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 37 | *3-701-948-22 | (AEP,WG)...LABEL, FUSE | |
| 38 | *4-917-244-01 | (AEP,WG)...HOLDER, LED | |
| 39 | *4-924-972-01 | SPACER | |
| 901 | *1-626-550-11 | PC BOARD, VR LED | |
| 902 | *1-626-560-11 | PC BOARD, VOLUME | |
| 903 | *A-4472-304-A | (US).....MOUNTED PCB, DISPLAY | |
| | *A-4472-313-A | (AEP,WG)...MOUNTED PCB, DISPLAY | |
| 904 | *1-626-562-11 | PC BOARD, CATCHER RAY | |
| 905 | *1-626-549-11 | PC BOARD, RECTIFICATION | |
| 906 | *A-4388-750-A | (US,AEP)...MOUNTED PCB, POWER (A CLASS) | |
| | *A-4388-780-A | (WG).....MOUNTED PCB, POWER (A CLASS) | |
| 907 | *1-626-558-11 | PC BOARD, SIRCS | |
| 908 | *A-4388-749-A | (US).....MOUNTED PCB, POWER | |
| | *A-4388-777-A | (AEP)....MOUNTED PCB, POWER | |
| | *A-4388-779-A | (WG).....MOUNTED PCB, POWER | |
| 909 | *A-4351-662-A | (US).....MOUNTED PCB, TUNER | |
| | *A-4351-671-A | (AEP)....MOUNTED PCB, TUNER | |
| | *A-4351-672-A | (WG).....MOUNTED PCB, TUNER | |
| 910 | *A-4382-345-A | (US).....MOUNTED PCB, INPUT | |
| | *A-4382-359-A | (AEP)....MOUNTED PCB, INPUT | |
| | *A-4382-361-A | (WG).....MOUNTED PCB, INPUT | |
| 911 | *1-626-564-11 | PC BOARD, MOTOR TERMINAL | |
| 912 | *1-626-557-11 | PC BOARD, MUTING | |
| 913 | *1-626-561-11 | PC BOARD, MOTOR VOLUME | |
| 920 | ⚠1-555-750-00 | (AEP,WG)...CORD, POWER | |
| | ⚠1-559-819-11 | (US).....CORD, POWER | |
| 921 | ⚠1-533-183-11 | HOLDER, FUSE | |
| 922 | *1-508-809-00 | BASE POST (14MM) 2P | |
| 923 | *1-535-139-00 | BASE POST 19MM (10MM PITCH) 2P | |
| FL301 | 1-519-462-11 | INDICATOR TUBE, FLUORESCENT | |
| RV604 | 1-238-151-11 | RES, VAR, CARBON (MOTOR) 120K/120K (ATTENUATER) | |
| T801 | ⚠1-449-257-11 | (US).....TRANSFORMER, POWER | |
| T801 | ⚠1-449-258-11 | (AEP,WG)...TRANSFORMER, POWER | |
| T901 | ⚠1-448-517-21 | (US).....TRANSFORMER, POWER | |
| T901 | ⚠1-448-523-11 | (AEP,WG)...TRANSFORMER, POWER | |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

# SECTION 5
# ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

WG : West Germany

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| 901 | *1-626-550-11 | PC BOARD, VR LED | | | |
| 902 | *1-626-560-11 | PC BOARD, VOLUME | | | |
| 903 | *A-4472-304-A | (US).....MOUNTED PCB, DISPLAY | | | |
| | *A-4472-313-A | (AEP,WG)...MOUNTED PCB, DISPLAY | | | |
| 904 | *1-626-562-11 | PC BOARD, CATCHER RAY | | | |
| 905 | *1-626-549-11 | PC BOARD, RECTIFICATION | | | |
| 906 | *A-4388-750-A | (US,AEP)...MOUNTED PCB, POWER (A CLASS) | | | |
| | *A-4388-780-A | (WG).....MOUNTED PCB, POWER (A CLASS) | | | |
| 907 | *1-626-558-11 | PC BOARD, SIRCS | | | |
| 908 | *A-4388-749-A | (US)....MOUNTED PCB, POWER | | | |
| | *A-4388-777-A | (AEP)...MOUNTED PCB, POWER | | | |
| | *A-4388-779-A | (WG)....MOUNTED PCB, POWER | | | |
| 909 | *A-4351-662-A | (US)....MOUNTED PCB, TUNER | | | |
| | *A-4351-671-A | (AEP)...MOUNTED PCB, TUNER | | | |
| | *A-4351-672-A | (WG)....MOUNTED PCB, TUNER | | | |
| 910 | *A-4382-345-A | (US)....MOUNTED PCB, INPUT | | | |
| | *A-4382-359-A | (AEP)...MOUNTED PCB, INPUT | | | |
| | *A-4382-361-A | (WG)....MOUNTED PCB, INPUT | | | |
| 911 | *1-626-564-11 | PC BOARD, MOTOR TERMINAL | | | |
| 912 | *1-626-557-11 | PC BOARD, MUTING | | | |
| 913 | *1-626-561-11 | PC BOARD, MOTOR VOLUME | | | |
| 920 | ⚠1-555-750-00 | (AEP,WG)...CORD, POWER | | | |
| | ⚠1-559-819-11 | (US).....CORD, POWER | | | |
| 921 | ⚠1-533-183-11 | HOLDER, FUSE | | | |
| 922 | *1-508-809-00 | BASE POST (14MM) 2P | | | |
| 923 | *1-535-139-00 | BASE POST 19MM (10MM PITCH) 2P | | | |
| BA501 | 1-528-120-00 | BATTERY, LITHIUM (CR-2025) | | | |
| C101 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C102 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C103 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C105 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C106 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C107 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C111 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C112 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C113 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C114 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C115 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C116 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C117 | 1-162-211-11 | (US,AEP)...CAP,CERAMIC | 33PF | | |
| C117 | 1-162-290-31 | (WG)...CERAMIC | 470PF | 10% | 50V |
| C118 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C119 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C121 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C122 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C124 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C125 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C126 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C127 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C128 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C129 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C130 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C131 | 1-136-155-00 | FILM | 0.015MF | 5% | 50V |
| C133 | 1-136-161-00 | FILM | 0.047MF | 5% | 50V |
| C134 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C135 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V |
| C136 | 1-136-161-00 | FILM | 0.047MF | 5% | 50V |
| C137 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C138 | 1-162-289-31 | (AEP,WG)...CERAMIC | 390PF | 10% | 50V |
| C138 | 1-162-291-31 | (US).....CERAMIC | 560PF | | |
| C139 | 1-162-289-31 | (AEP,WG)...CERAMIC | 390PF | 10% | 50V |
| C139 | 1-162-291-31 | (US).....CERAMIC | 560PF | | |
| C140 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C141 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C142 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C144 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C145 | 1-124-902-00 | ELECT | 0.47MF | 20% | 50V |
| C146 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C147 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C148 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C149 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C151 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C152 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C153 | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V |
| C154 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C155 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C156 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C157 | 1-162-207-31 | CERAMIC | 22PF | 5% | 50V |
| C158 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C159 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C160 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C161 | 1-162-206-31 | CERAMIC | 20PF | 5% | 50V |
| C162 | 1-162-206-31 | CERAMIC | 20PF | 5% | 50V |
| C163 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C301 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C302 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C303 | 1-162-210-31 | CERAMIC | 30PF | 5% | 50V |
| C304 | 1-162-210-31 | CERAMIC | 30PF | 5% | 50V |
| C305 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C306 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C307 | 1-136-169-00 | FILM | 0.22MF | 5% | 50V |
| C308 | 1-101-004-00 | CERAMIC | 0.01MF | | 50V |
| C309 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C310 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C403 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C404 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C405 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C406 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C407 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C408 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C409 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C412 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C413 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C414 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C415 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C416 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C418 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C421 | 1-162-282-31 | (US,AEP)...CERAMIC | 100PF | | |
| C421 | 1-162-284-31 | (WG).....CERAMIC | 150PF | 10% | 50V |
| C422 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C423 | 1-124-963-11 | ELECT | 33MF | 20% | 16V |
| C424 | 1-130-480-00 | MYLAR | 0.0056MF | 5% | 50V |
| C425 | 1-130-473-00 | MYLAR | 0.0015MF | 5% | 50V |
| C426 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C427 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C428 | 1-162-284-31 | (WG)...CERAMIC | 150PF | 10% | 50V |
| C429 | 1-162-282-31 | (WG)...CERAMIC | 100PF | 10% | 50V |
| C430 | 1-102-978-00 | (WG)...CERAMIC | 220PF | 5% | 50V |
| C433 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C437 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C453 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C454 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C455 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C456 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C457 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C458 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C459 | 1-162-286-31 | (WG)...CERAMIC | 220PF | 10% | 50V |
| C462 | 1-123-875-11 | ELECT | 10MF | 20% | 50V |
| C468 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C471 | 1-162-282-31 | (US,AEP)...CERAMIC | 100PF | | |
| C471 | 1-162-284-31 | (WG).....CERAMIC | 150PF | 10% | 50V |
| C472 | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C473 | 1-124-963-11 | ELECT | 33MF | 20% | 16V |
| C474 | 1-130-480-00 | MYLAR | 0.0056MF | 5% | 50V |
| C475 | 1-130-473-00 | MYLAR | 0.0015MF | 5% | 50V |
| C476 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C477 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C478 | 1-162-284-31 | (WG)...CERAMIC | 150PF | 10% | 50V |
| C479 | 1-162-282-31 | (WG)...CERAMIC | 100PF | 10% | 50V |
| C480 | 1-102-978-00 | (WG)...CERAMIC | 220PF | 5% | 50V |
| C501 | 1-136-169-00 | FILM | 0.22MF | 5% | 50V |
| C502 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C503 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C504 | 1-101-004-00 | CERAMIC | 0.01MF | | 50V |
| C505 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C506 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C601 | 1-162-291-31 | CERAMIC | 560PF | 10% | 50V |
| C602 | 1-130-475-00 | MYLAR | 0.0022MF | 10% | 50V |
| C603 | 1-136-153-00 | MYLAR | 0.01MF | 10% | 50V |
| C604 | 1-130-482-00 | MYLAR | 0.0082MF | 10% | 50V |
| C605 | 1-136-161-00 | MYLAR | 0.047MF | 10% | 50V |
| C611 | 1-124-273-00 | ELECT | 3.3MF | 20% | 50V |
| C651 | 1-162-291-31 | CERAMIC | 560PF | 10% | 50V |
| C652 | 1-130-475-00 | MYLAR | 0.0022MF | 10% | 50V |
| C653 | 1-136-153-00 | MYLAR | 0.01MF | 10% | 50V |
| C654 | 1-130-482-00 | MYLAR | 0.0082MF | 10% | 50V |
| C655 | 1-136-161-00 | MYLAR | 0.047MF | 10% | 50V |
| C701 | 1-102-947-00 | CERAMIC | 10PF | 0.5PF | 50V |
| C702 | 1-102-978-00 | CERAMIC | 220PF | 5% | 50V |
| C703 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C704 | 1-107-276-11 | (US,AEP)...MICA | 3PF | | 100V |
| C704 | 1-162-549-00 | (WG).....CERAMIC | 18PF | 5% | 500V |
| C705 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C706 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C707 | 1-124-908-11 | ELECT | 22MF | 20% | 50V |
| C708 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C709 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C710 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C713 | 1-102-233-00 | CERAMIC | 33PF | 10% | 500V |
| C714 | 1-102-233-00 | CERAMIC | 33PF | 10% | 500V |
| C715 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C716 | 1-136-157-00 | (US,WG)...FILM | 0.022MF | 5% | 50V |
| C716 | 1-136-161-00 | (AEP).....FILM | 0.047MF | | |
| C717 | 1-130-515-11 | (AEP).....MYLAR | 0.047MF | | |
| C718 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C721 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C722 | 1-124-472-11 | ELECT | 470MF | 20% | 6.3V |
| C723 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C724 | 1-102-978-00 | CERAMIC | 220PF | 5% | 50V |
| C725 | 1-130-477-00 | (WG)...MYLAR | 0.0033MF | 5% | 50V |
| C726 | 1-106-367-00 | (WG)...MYLAR | 0.01MF | 10% | 100V |
| C727 | 1-106-367-00 | (WG)...MYLAR | 0.01MF | 10% | 100V |
| C737 | 1-136-157-00 | (WG)...FILM | 0.022MF | 5% | 50V |
| C738 | 1-136-157-00 | (WG)...FILM | 0.022MF | 5% | 50V |
| C739 | 1-136-161-00 | CAP, METALIZED FILM | 0.047MF | | |
| C751 | 1-102-947-00 | (WG)...CERAMIC | 10PF | 0.5PF | 50V |
| C752 | 1-102-978-00 | CERAMIC | 220PF | 5% | 50V |
| C753 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C754 | 1-107-276-11 | (US,AEP)...MICA | 3PF | | 100V |
| C754 | 1-162-549-00 | (WG).....CERAMIC | 18PF | 5% | 500V |
| C755 | 1-124-499-11 | ELECT | 1MF | 20% | 50V |
| C756 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C757 | 1-124-908-11 | ELECT | 22MF | 20% | 50V |
| C758 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C759 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C760 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C763 | 1-102-233-00 | CERAMIC | 33PF | 10% | 500V |
| C764 | 1-102-233-00 | CERAMIC | 33PF | 10% | 500V |
| C765 | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C766 | 1-136-157-00 | (US,WG)...FILM | 0.022MF | 5% | 50V |
| C766 | 1-136-161-00 | (AEP).....FILM | 0.047MF | | |

| Ref.No. | Part No. | Description |
|---|---|---|
| C767 | 1-130-515-11 | (AEP)...MYLAR 0.047MF |
| C768 | 1-136-165-00 | FILM 0.1MF 5% 50V |
| C773 | 1-162-294-31 | CERAMIC 0.001MF 10% 50V |
| C774 | 1-102-978-00 | (WG)...CERAMIC 220PF 5% 50V |
| C775 | 1-130-477-00 | (WG)...MYLAR 0.0033MF 5% 50V |
| C776 | 1-106-367-00 | (WG)...MYLAR 0.01MF 10% 100V |
| C777 | 1-106-367-00 | (WG)...MYLAR 0.01MF 10% 100V |
| C787 | 1-136-157-00 | (WG)...FILM 0.022MF 5% 50V |
| C788 | 1-136-157-00 | (WG)...FILM 0.022MF 5% 50V |
| C789 | 1-136-161-00 | CAP, METALIZED FILM 0.047MF |
| C801 | 1-125-416-11 | (AEP,WG)...ELECT 10000MF 20% 63V |
| C801 | 1-125-530-11 | (US).....ELECT 8200MF 63V |
| C802 | 1-124-922-11 | ELECT 1000MF 20% 63V |
| C803 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C804 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C805 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C806 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C807 | 1-123-875-11 | ELECT 10MF 20% 50V |
| C808 | 1-123-875-11 | ELECT 10MF 20% 50V |
| C810 | 1-162-282-31 | CERAMIC 100PF 10% 50V |
| C811 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C812 | 1-124-360-00 | ELECT 1000MF 20% 16V |
| C813 | 1-123-332-00 | ELECT 47MF 20% 16V |
| C814 | 1-123-875-11 | ELECT 10MF 20% 50V |
| C815 | 1-124-499-11 | ELECT 1MF 20% 50V |
| C816 | 1-124-902-00 | ELECT 0.47MF 20% 50V |
| C817 | 1-161-379-00 | CERAMIC 0.01MF 30% 16V |
| C818 | 1-124-464-11 | ELECT 0.22MF 20% 50V |
| C821 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C822 | 1-126-105-11 | ELECT 1000MF 20% 35V |
| C823 | 1-126-104-11 | ELECT 470MF 20% 35V |
| C824 | 1-102-355-00 | CERAMIC 0.01MF 250V |
| C851 | 1-125-416-11 | (AEP,WG)...ELECT 10000MF 20% 63V |
| C851 | 1-125-530-11 | (US).....ELECT 8200MF 63V |
| C852 | 1-124-922-11 | ELECT 1000MF 20% 63V |
| C901 ⚠ | 1-161-744-00 | CERAMIC 0.01MF 400V |
| CF101 | 1-567-389-11 | (AEP,WG)...FILTER, CERAMIC |
| CF101 | 1-567-393-11 | (US).....FILTER, CERAMIC |
| CF102 | 1-567-389-11 | (AEP,WG)...FILTER, CERAMIC |
| CF102 | 1-567-393-11 | (US).....FILTER, CERAMIC |
| CF103 | 1-567-250-11 | OSCILLATOR, CERAMIC |
| CF104 | 1-567-389-11 | (WG)...FILTER, CERAMIC |
| CF301 | 1-567-170-00 | OSCILLATOR, CERAMIC |
| CF501 | 1-527-822-00 | OSCILLATOR, CERAMIC |
| CNH201* | 1-564-336-00 | PIN, CONNECTOR 2P |
| CNH404* | 1-564-336-00 | PIN, CONNECTOR 2P |
| CNJ701 | 1-563-347-11 | JACK, LARGE TYPE (HEADPHONES) |
| CNJ901⚠ | 1-526-794-11 | (AEP,WG)...OUTLET, AC |
| CNJ901⚠ | 1-540-010-11 | (US).....OUTLET, AC |
| CNP301* | 1-564-338-00 | PIN, CONNECTOR 4P |
| CNP402* | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P |
| CNP404* | 1-565-513-11 | PIN, CONNECTOR 2P |
| CNP501* | 1-560-061-00 | PIN, CONNECTOR 3P |
| CNP502* | 1-564-340-00 | PIN, CONNECTOR 6P |
| CNP612* | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P |
| CNP701* | 1-564-529-11 | CONNECTOR, BOARD TO BOARD 5P |

| Ref.No. | Part No. | Description |
|---|---|---|
| CNP702* | 1-564-342-11 | PIN, CONNECTOR 8P |
| CNP710* | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P |
| CNP751* | 1-564-529-11 | CONNECTOR, BOARD TO BOARD 5P |
| CNP760* | 1-564-704-31 | PIN, CONNECTOR (SMALL TYPE) 2P |
| CNP801* | 1-564-104-00 | PIN, CONNECTOR 3P |
| CNP802* | 1-564-104-00 | PIN, CONNECTOR 3P |
| CNP803* | 1-564-104-00 | PIN, CONNECTOR 3P |
| CNS701* | 1-562-516-11 | CONNECTOR, BOARD TO BOARD 5P |
| CNS751* | 1-562-516-11 | CONNECTOR, BOARD TO BOARD 5P |
| D101 | 8-719-000-26 | DIODE US1060M |
| D102 | 8-719-000-26 | DIODE US1060M |
| D103 | 8-719-000-26 | DIODE US1060M |
| D104 | 8-719-000-26 | DIODE US1060M |
| D105 | 8-719-000-26 | DIODE US1060M |
| D201 | 8-719-000-26 | DIODE US1060M |
| D301 | 8-719-000-26 | DIODE US1060M |
| D302 | 8-719-914-11 | DIODE HZ4ALL |
| D303 | 8-719-310-78 | DIODE SEL1810W-C (MUTING) |
| D304 | 8-719-939-96 | (AEP,WG)...DIODE GL8PR48-BC (STANDBY RECEAVED) |
| D305 | 8-719-000-26 | DIODE US1060M |
| D306 | 8-719-000-26 | DIODE US1060M |
| D307 | 8-719-000-26 | DIODE US1060M |
| D308 | 8-719-000-26 | DIODE US1060M |
| D309 | 8-719-000-26 | DIODE US1060M |
| D310 | 8-719-000-26 | DIODE US1060M |
| D311 | 8-719-000-26 | DIODE US1060M |
| D312 | 8-719-000-26 | DIODE US1060M |
| D313 | 8-719-000-26 | DIODE US1060M |
| D323 | 8-719-000-26 | DIODE US1060M |
| D325 | 8-719-000-26 | (AEP,WG)...DIODE US1060M |
| D326 | 8-719-000-26 | (AEP,WG)...DIODE US1060M |
| D327 | 8-719-000-26 | (US).....DIODE US1060M |
| D328 | 8-719-000-26 | (AEP,WG)...DIODE US1060M |
| D329 | 8-719-000-26 | DIODE US1060M |
| D330 | 8-719-000-26 | DIODE US1060M |
| D501 | 8-719-000-26 | DIODE US1060M |
| D502 | 8-719-000-26 | DIODE US1060M |
| D503 | 8-719-000-26 | DIODE US1060M |
| D504 | 8-719-000-26 | DIODE US1060M |
| D505 | 8-719-000-26 | DIODE US1060M |
| D506 | 8-719-000-26 | DIODE US1060M |
| D601 | 8-719-801-27 | DIODE TL0223 |
| D602 | 8-719-304-14 | DIODE SEL2510W-C |
| D701 | 8-719-000-26 | DIODE US1060M |
| D702 | 8-719-933-41 | DIODE HZS6C3L |
| D703 | 8-719-933-41 | DIODE HZS6C3L |
| D704 | 8-719-000-26 | DIODE US1060M |
| D705 | 8-719-000-26 | DIODE US1060M |
| D706 | 8-719-000-26 | DIODE US1060M |
| D707 | 8-719-000-26 | DIODE US1060M |
| D710 | 8-719-000-26 | DIODE US1060M |
| D712 | 8-719-000-26 | DIODE US1060M |
| D713 | 8-719-000-26 | DIODE US1060M |
| D714 | 8-719-000-26 | DIODE US1060M |
| D715 | 8-719-000-26 | DIODE US1060M |
| D717 | 8-719-000-26 | DIODE US1060M |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

| Ref.No. | Part No. | Description |
|---|---|---|
| D718 | 8-719-000-26 | DIODE US1060M |
| D719 | 8-719-000-26 | DIODE US1060M |
| D721 | 8-719-000-26 | DIODE US1060M |
| D751 | 8-719-000-26 | DIODE US1060M |
| D752 | 8-719-933-41 | DIODE HZS6C3L |
| D753 | 8-719-933-41 | DIODE HZS6C3L |
| D754 | 8-719-000-26 | DIODE US1060M |
| D755 | 8-719-000-26 | DIODE US1060M |
| D756 | 8-719-000-26 | DIODE US1060M |
| D757 | 8-719-000-26 | DIODE US1060M |
| D760 | 8-719-000-26 | DIODE US1060M |
| D763 | 8-719-000-26 | DIODE US1060M |
| D764 | 8-719-000-26 | DIODE US1060M |
| D765 | 8-719-000-26 | DIODE US1060M |
| D767 | 8-719-000-26 | DIODE US1060M |
| D768 | 8-719-000-26 | DIODE US1060M |
| D769 | 8-719-000-26 | DIODE US1060M |
| D771 | 8-719-000-26 | DIODE US1060M |
| D801 | 8-719-302-38 | DIODE RBV-602-01 |
| D802 | 8-719-511-40 | DIODE S1VB40 |
| D803 | 8-719-511-40 | DIODE S1VB40 |
| D804 | 8-719-934-21 | DIODE HZS30-1L |
| D805 | 8-719-000-06 | DIODE MC921 |
| D806 | 8-719-511-40 | DIODE S1VB40 |
| D807 | 8-719-933-41 | DIODE HZS6C3L |
| D808 | 8-719-914-11 | DIODE HZ4ALL |
| D809 | 8-719-000-26 | DIODE US1060M |
| D810 | 8-719-160-26 | DIODE RD5.6F |
| D811 | 8-719-933-41 | DIODE HZS6C3L |
| D901 | 8-719-000-26 | DIODE US1060M |
| F801 ⚠ | 1-532-325-00 | (AEP,WG)...FUSE, TIME-LAG 6.3A |
| F801 ⚠ | 1-532-748-11 | (US).....FUSE, GLASS TUBE 6.3A |
| F802 ⚠ | 1-532-325-00 | (AEP,WG)...FUSE, TIME-LAG 6.3A |
| F802 ⚠ | 1-532-748-11 | (US).....FUSE, GLASS TUBE 6.3A |
| F901 ⚠ | 1-532-286-00 | (AEP,WG)...FUSE, TIME-LAG 2.5A |
| F901 ⚠ | 1-532-598-00 | (US).....FUSE, GLASS TUBE 4A |
| F902 ⚠ | 1-532-286-00 | (AEP,WG)...FUSE, TIME-LAG 2.5A |
| FE101 | 1-463-857-11 | (WG).....FRONT END (FM) |
| FE101 | 1-465-862-21 | (US,AEP)...FRONT END (FM) |
| FE102 | 1-235-936-11 | ENCAPSULATED COMPONENT (AM) |
| FL301 | 1-519-462-11 | INDICATOR TUBE, FLUORESCENT |
| HS401 | *3-309-144-21 | HEAT SINK |
| HS402 | *4-363-147-00 | HEAT SINK, H.PIN |
| IC101 | 8-759-804-55 | IC LA1266 |
| IC102 | 8-759-801-80 | IC LA3401 |
| IC103 | 8-757-925-20 | IC CX-7925B |
| IC301 | 8-759-141-94 | IC UPD75216AGF-513-3BE |
| IC302 | 8-759-800-95 | IC LB1493 |
| IC303 | 8-749-901-49 | IC SBX1492-51 |
| IC401 | 8-759-602-18 | IC M5219L |
| IC404 | 8-759-805-14 | IC LC7822 |
| IC405 | 8-757-700-00 | IC CX-770A |
| IC406 | 8-759-820-62 | IC LB1639 |
| IC407 | 8-759-801-01 | IC LC4966 |
| IC408 | 8-759-604-40 | IC M5F78M15 |

| Ref.No. | Part No. | Description |
|---|---|---|
| IC409 | 8-759-604-46 | IC M5F79M15 |
| IC501 | 8-759-320-39 | IC HD614042FH46 |
| J401 | 1-565-320-11 | JACK, PIN 6P |
| J402 | 1-565-320-11 | JACK, PIN 6P |
| J407 | 1-565-258-21 | JACK, PIN 4P |
| L101 | 1-410-328-11 | INDUCTOR 10UH |
| L102 | 1-410-576-11 | INDUCTOR 1MMH |
| L103 | 1-410-328-11 | INDUCTOR 10UH |
| L104 | 1-235-126-00 | (WG)...ENCAPSULATED COMPONENT |
| L501 | 1-410-328-11 | INDUCTOR 10UH |
| L701 | *1-420-872-00 | COIL, AIR CORE |
| L751 | *1-420-872-00 | COIL, AIR CORE |
| LPF101 | 1-235-164-00 | FILTER, LOW PASS |
| LPF102 | 1-235-164-00 | FILTER, LOW PASS |
| Q101 | 8-729-672-42 | TRANSISTOR 2SC2724-C |
| Q102 | 8-729-672-42 | TRANSISTOR 2SC2724-C |
| Q103 | 8-729-672-42 | (WG)...TRANSISTOR 2SC2724-C |
| Q104 | 8-729-672-42 | (WG)...TRANSISTOR 2SC2724-C |
| Q106 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q107 | 8-729-201-83 | TRANSISTOR 2SC3112 |
| Q108 | 8-729-203-05 | TRANSISTOR 2SK30AGR333 |
| Q109 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q110 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q111 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q201 | 8-729-178-55 | TRANSISTOR 2SC2785-E |
| Q202 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q301 | 8-729-900-89 | TRANSISTOR DTC144ES |
| Q303 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q304 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q305 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q306 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q307 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q308 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q309 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q310 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q405 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q406 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q407 | 8-729-107-98 | TRANSISTOR 2SC3622A-L |
| Q408 | 8-729-107-98 | TRANSISTOR 2SC3622A-L |
| Q409 | 8-729-900-36 | TRANSISTOR DTC124ES |
| Q457 | 8-729-107-98 | TRANSISTOR 2SC3622A-L |
| Q458 | 8-729-107-98 | TRANSISTOR 2SC3622A-L |
| Q701 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q702 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q703 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q704 | 8-729-203-21 | TRANSISTOR 2SK389-GR |
| Q705 | 8-729-168-22 | TRANSISTOR 2SC2682 |
| Q706 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q707 | 8-729-114-22 | TRANSISTOR 2SA1142 |
| Q708 | 8-729-168-22 | TRANSISTOR 2SC2682 |
| Q709 | 8-729-209-15 | TRANSISTOR 2SD2012 |
| Q713 | 8-729-120-05 | TRANSISTOR 2SC4431 |
| Q714 | 8-729-120-02 | TRANSISTOR 2SA1684 |
| Q715 | 8-729-304-32 | TRANSISTOR 2SC3855 |
| Q716 | 8-729-304-29 | TRANSISTOR 2SA1491 |
| Q717 | 8-729-108-14 | TRANSISTOR 2SA988F |
| Q718 | 8-729-108-14 | TRANSISTOR 2SA988F |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref.No. | Part No. | Description |
|---|---|---|
| Q721 | 8-729-108-05 | TRANSISTOR 2SC1841-PA |
| Q722 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q723 | 8-729-178-55 | TRANSISTOR 2SC2785-E |
| Q724 | 8-729-178-55 | TRANSISTOR 2SC2785-E |
| Q751 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q752 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q753 | 8-729-178-54 | TRANSISTOR 2SC2785 |
| Q754 | 8-729-203-21 | TRANSISTOR 2SK389-GR |
| Q755 | 8-729-168-22 | TRANSISTOR 2SC2682 |
| Q756 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q757 | 8-729-114-22 | TRANSISTOR 2SA1142 |
| Q758 | 8-729-168-22 | TRANSISTOR 2SC2682 |
| Q759 | 8-729-209-15 | TRANSISTOR 2SD2012 |
| Q763 | 8-729-120-05 | TRANSISTOR 2SC4431 |
| Q764 | 8-729-120-02 | TRANSISTOR 2SA1684 |
| Q765 | 8-729-304-32 | TRANSISTOR 2SC3855 |
| Q766 | 8-729-304-29 | TRANSISTOR 2SA1491 |
| Q767 | 8-729-108-14 | TRANSISTOR 2SA988F |
| Q768 | 8-729-108-14 | TRANSISTOR 2SA988F |
| Q801 | 8-729-114-22 | TRANSISTOR 2SA1142 |
| Q802 | 8-729-209-15 | TRANSISTOR 2SD2012 |
| Q803 | 8-729-178-55 | TRANSISTOR 2SC2785-E |
| Q804 | 8-729-178-55 | TRANSISTOR 2SC2785-E |
| Q805 | 8-729-115-22 | TRANSISTOR BN1A3Q |
| Q806 | 8-729-900-63 | TRANSISTOR DTA124ES |
| Q807 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q808 | 8-729-178-55 | TRANSISTOR 2SC2785-E |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R101 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | |
| R102 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W | |
| R103 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R104 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R105 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R106 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R107 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R108 ⚠ | 1-247-698-81 | (WG).....CARBON | 68 | 5% | 1/4W | F |
| R108 ⚠ | 1-247-703-11 | (US,AEP)...CARBON | 180 | | 1/4W | F |
| R109 | 1-249-438-11 | (WG)...CARBON | 56K | 5% | 1/4W | |
| R110 | 1-249-441-11 | (WG)...CARBON | 100K | 5% | 1/4W | |
| R111 | 1-249-411-11 | (WG)...CARBON | 330 | 5% | 1/4W | |
| R112 | 1-249-415-11 | (WG)...CARBON | 680 | 5% | 1/4W | |
| R113 | 1-249-411-11 | (WG)...CARBON | 330 | 5% | 1/4W | |
| R116 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R117 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R118 ⚠ | 1-247-701-11 | CARBON | 120 | 5% | 1/4W | F |
| R119 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R120 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R121 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R122 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R123 | 1-249-402-11 | CARBON | 56 | 5% | 1/4W | |
| R124 | 1-247-857-00 | (US).....CARBON | 12K | | 1/4W | |
| R124 | 1-249-434-11 | (AEP,WG)...CARBON | 27K | | 1/4W | |
| R125 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R126 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R127 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R128 | 1-249-404-00 | CARBON | 82 | 5% | 1/4W | |
| R129 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R132 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R133 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | |
| R134 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W | |
| R135 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | |
| R136 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W | |
| R137 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R138 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R141 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R142 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R143 ⚠ | 1-247-701-11 | CARBON | 120 | 5% | 1/4W | F |
| R144 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R145 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R146 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R147 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R148 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R149 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R151 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R156 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R157 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R158 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R159 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R160 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R161 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W | |
| R162 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | |
| R163 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R164 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R165 ⚠ | 1-247-701-11 | CARBON | 120 | 5% | 1/4W | F |
| R166 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R167 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R168 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R169 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R170 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R171 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R201 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R202 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R203 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | |
| R205 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R301 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R302 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R305 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R306 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R307 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R308 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R309 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R310 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R311 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R312 | 1-249-413-11 | (AEP,WG)...CARBON | 470 | 5% | 1/4W | |
| R313 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R314 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R315 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R316 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R317 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R318 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R319 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R320 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R321 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R322 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R323 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R324 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R325 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R326 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R327 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R329 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R330 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R331 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R332 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R333 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R334 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R335 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | |
| R336 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R337 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R338 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R339 | ⚠ 1-249-447-11 | CARBON | 1 | 5% | 1/4W | F |
| R340 | ⚠ 1-249-447-11 | CARBON | 1 | 5% | 1/4W | F |
| R341 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R342 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R343 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R401 | 1-247-411-11 | (US,AEP)...CARBON | 330 | | 1/4W | |
| R401 | 1-249-417-11 | (WG).....CARBON | 1K | | 1/4W | |
| R403 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R405 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R413 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R414 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R415 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R416 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R421 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R422 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R423 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R424 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W | |
| R425 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R426 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R427 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R429 | 1-249-417-11 | (WG)...CARBON | 1K | 5% | 1/4W | |
| R437 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R438 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R441 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R442 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R446 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R447 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R451 | 1-247-411-11 | (US,AEP)...CARBON | 330 | 5% | 1/4W | |
| R451 | 1-249-417-11 | (WG).....CARBON | 1K | 5% | 1/4W | |
| R453 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R455 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R463 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R464 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R465 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R466 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R471 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R472 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R473 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R474 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W | |
| R475 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R476 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R477 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R479 | 1-249-417-11 | (WG)...CARBON | 1K | 5% | 1/4W | |
| R501 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R502 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R505 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R506 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R507 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R508 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R509 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R510 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R512 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R519 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R520 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R522 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R523 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R525 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R526 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R528 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R529 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R531 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R537 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R569 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R570 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R572 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R573 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R575 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R576 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R578 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R579 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R581 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R601 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R602 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | |
| R603 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R604 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R605 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R606 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R607 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R611 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | |
| R612 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R613 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R614 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R615 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R651 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R652 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | |
| R653 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R654 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R655 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R656 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R657 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R662 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R663 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R665 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R701 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R702 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R703 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R704 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R705 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R706 | ⚠ 1-247-694-11 | CARBON | 33 | 5% | 1/4W | F |
| R707 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R708 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R709 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | |
| R710 | 1-214-937-00 | CARBON | 1M | 5% | 1/3W | |
| R711 | 1-249-489-11 | CARBON | 22K | 5% | 1/2W | |
| R712 | 1-247-740-11 | CARBON | 120 | 5% | 1/2W | |
| R713 | 1-249-490-11 | CARBON | 27K | 5% | 1/2W | |
| R714 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R715 ⚠ | 1-247-700-11 | CARBON | 100 | 5% | 1/4W | F |
| R716 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R717 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R718 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R720 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R721 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R722 ⚠ | 1-247-700-11 | CARBON | 100 | 5% | 1/4W | F |
| R723 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R724 | 1-217-611-00 | RES, METAL PLATE 0.1 | | | | |
| R725 | 1-217-611-00 | RES, METAL PLATE 0.1 | | | | |
| R726 | 1-249-482-11 | CARBON | 4.7 | 5% | 1/2W | |
| R727 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W | |
| R731 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R732 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R733 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R734 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R735 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R736 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R737 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R738 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R739 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R740 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R743 ⚠ | 1-216-431-11 | METAL OXIDE | 560 | 5% | 1W | F |
| R744 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R745 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R748 | 1-247-727-11 | (WG)...CARBON | 10 | 5% | 1/2W | |
| R749 | 1-247-727-11 | (WG)...CARBON | 10 | 5% | 1/2W | |
| R751 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R752 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R753 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R754 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R755 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R756 ⚠ | 1-247-694-11 | CARBON | 33 | 5% | 1/4W | F |
| R757 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R758 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R759 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | |
| R760 | 1-214-937-00 | CARBON | 1M | 5% | 1/3W | |
| R761 | 1-249-489-11 | CARBON | 22K | 5% | 1/2W | |
| R762 | 1-247-740-11 | CARBON | 120 | 5% | 1/2W | |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R763 | 1-249-490-11 | CARBON | 27K | 5% | 1/2W | |
| R764 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R765 ⚠ | 1-247-700-11 | CARBON | 100 | 5% | 1/4W | F |
| R766 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R767 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R768 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R770 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R771 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R772 ⚠ | 1-247-700-11 | CARBON | 100 | 5% | 1/4W | F |
| R773 ⚠ | 1-247-688-11 | CARBON | 10 | 5% | 1/4W | F |
| R774 | 1-217-611-00 | RES, METAL PLATE 0.1 | | | | |
| R775 | 1-217-611-00 | RES, METAL PLATE 0.1 | | | | |
| R776 | 1-249-482-11 | CARBON | 4.7 | 5% | 1/2W | |
| R777 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W | |
| R781 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R782 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R793 ⚠ | 1-216-431-11 | METAL OXIDE | 560 | 5% | 1W | F |
| R794 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R795 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R798 | 1-247-727-11 | (WG)...CARBON | 10 | 5% | 1/2W | |
| R799 | 1-247-727-11 | (WG)...CARBON | 10 | 5% | 1/2W | |
| R803 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R810 ⚠ | 1-247-691-00 | CARBON | 18 | 5% | 1/4W | F |
| R811 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R812 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R813 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R814 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R817 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R818 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R820 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R821 ⚠ | 1-212-934-00 | FUSIBLE | 1 | 5% | 1/2W | F |
| R822 ⚠ | 1-212-934-00 | FUSIBLE | 1 | 5% | 1/2W | F |
| R823 ⚠ | 1-247-752-00 | CARBON | 1K | 5% | 1/2W | F |
| R824 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R825 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | |
| R826 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | |
| R901 ⚠ | 1-202-725-00 | (US)...SOLID | 3.3M | 10% | 1/2W | |
| RB301 | 1-232-953-11 | COMPOSITION CIRCUIT BLOCK 100KX9 | | | | |
| RB302 | 1-233-005-11 | COMPOSITION CIRCUIT BLOCK 47KX9 | | | | |
| RT101 | 1-228-996-00 | RES, ADJ, CARBON 47K (AM METER) | | | | |
| RT102 | 1-228-997-00 | RES, ADJ, CARBON 100K (STOP LEVEL) | | | | |
| RT103 | 1-228-997-00 | RES, ADJ, CARBON 100K (FM METER) | | | | |
| RT104 | 1-228-998-00 | RES, ADJ, CARBON 220K (STEREO SEPARATION) | | | | |
| RT701 | 1-228-989-00 | RES, ADJ, CARBON 470 (DC BIASS) | | | | |
| RT751 | 1-228-989-00 | RES, ADJ, CARBON 470 (DC BIASS) | | | | |

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref.No. | Part No. | Description |
|---|---|---|
| RV601 | 1-238-152-11 | RES, VAR, CARBON 150K/150K (BALANCE) |
| RV602 | 1-237-471-21 | RES, VAR, CARBON 250K/250K (TREBLE) |
| RV603 | 1-237-470-21 | RES, VAR, CARBON 1M/1M/500K/500K(BASS) |
| RV604 | 1-238-151-11 | RES, VAR, CARBON (MOTOR) 120K/120K (ATTENUATER) |
| RY701 | 1-515-348-00 | RELAY (SPEAKER MUTE) |
| RY901 ⚠ | 1-515-617-11 | (AEP,WG)...RELAY (POWER SWITCH) |
| RY901 ⚠ | 1-515-701-11 | (US).....RELAY (POWER SWITCH) |
| S301 | 1-554-303-21 | SWITCH, KEY BOARD (1) |
| S302 | 1-554-303-21 | SWITCH, KEY BOARD (2) |
| S303 | 1-554-303-21 | SWITCH, KEY BOARD (3) |
| S304 | 1-554-303-21 | SWITCH, KEY BOARD (PRESET -) |
| S305 | 1-554-303-21 | SWITCH, KEY BOARD (TUNING -) |
| S306 | 1-554-303-21 | SWITCH, KEY BOARD (AM) |
| S307 | 1-554-303-21 | SWITCH, KEY BOARD (4) |
| S308 | 1-554-303-21 | SWITCH, KEY BOARD (5) |
| S309 | 1-554-303-21 | SWITCH, KEY BOARD (6) |
| S310 | 1-554-303-21 | SWITCH, KEY BOARD (PRESET +) |
| S311 | 1-554-303-21 | SWITCH, KEY BOARD (TUNING +) |
| S312 | 1-554-303-21 | SWITCH, KEY BOARD (FM) |
| S313 | 1-554-303-21 | SWITCH, KEY BOARD (7) |
| S314 | 1-554-303-21 | SWITCH, KEY BOARD (8) |
| S315 | 1-554-303-21 | SWITCH, KEY BOARD (9) |
| S316 | 1-554-303-21 | SWITCH, KEY BOARD (FM MODE) |
| S317 | 1-554-303-21 | SWITCH, KEY BOARD (MEMORY) |
| S318 | 1-554-303-21 | SWITCH, KEY BOARD (0) |
| S319 | 1-554-303-21 | SWITCH, KEY BOARD (ENTER) |
| S320 | 1-554-303-21 | SWITCH, KEY BOARD (AUTO/MAN) |
| S321 | 1-554-303-21 | SWITCH, KEY BOARD (TUNER) |
| S322 | 1-554-303-21 | SWITCH, KEY BOARD (DAT) |
| S324 | 1-554-303-21 | SWITCH, KEY BOARD (VIDEO) |
| S326 | 1-554-303-21 | SWITCH, KEY BOARD (MUTING) |
| S327 | 1-554-303-21 | SWITCH, KEY BOARD (PHONO) |
| S328 | 1-554-303-21 | SWITCH, KEY BOARD (CD) |
| S329 | 1-554-303-21 | SWITCH, KEY BOARD (TAPE) |
| S331 | 1-554-303-21 | SWITCH, KEY BOARD (SYSTEM POWER) |
| S601 | 1-571-514-11 | SWITCH, PUSH (2 KEY) (SOURCE DIRECT/LOUDNESS) |
| S701 | 1-570-897-11 | SWITCH, SLIDE (REMOTE)(SPEAKER) |

| Ref.No. | Part No. | Description |
|---|---|---|
| T101 | 1-404-743-11 | COIL, DISCRIMINATOR |
| T102 | 1-404-742-11 | COIL, DISCRIMINATOR |
| T103 | 1-404-713-11 | TRANSFORMER, IF (AM) |
| T801 ⚠ | 1-449-257-11 | (US).....TRANSFORMER, POWER |
| T801 ⚠ | 1-449-258-11 | (AEP,WG)...TRANSFORMER, POWER |
| T901 ⚠ | 1-448-517-21 | (US).....TRANSFORMER, POWER |
| T901 ⚠ | 1-448-523-11 | (AEP,WG)...TRANSFORMER, POWER |
| TH801 | 1-202-850-00 | THERMISTOR (POSITIVE) 2.2 |
| TH851 | 1-202-850-00 | THERMISTOR (POSITIVE) 2.2 |
| TM101 | 1-536-708-00 | (US,AEP)...TERMINAL BOARD, PUSH 4P (ANTENNA) |
| TM102 | 1-563-199-11 | (WG)...CONNECTOR, PAL (ANTENNA) |
| TM103 | 1-536-707-00 | (WG)...TERMINAL BOARD, PUSH 2P(ANTENNA) |
| TM201 | 1-564-980-11 | PIN, CONNECTOR 4P (CONTROL S) |
| TM701 | 1-537-152-11 | TERMINAL BOARD (SP) |
| TP101 | *1-560-060-00 | PIN, CONNECTOR 2P |
| VZ901 ⚠ | 1-807-180-31 | VARISTOR SNR-14A471U |
| XT101 | 1-567-826-21 | VIBRATOR, CRYSTAL (7.2MHZ) |

ACCESSORY & PACKING MATERIAL

| | |
|---|---|
| 1-463-987-11 | (AEP,WG)...REMOTE COMMANDER (RM-S60) |
| 1-463-986-11 | (US).....REMOTE COMMANDER (RM-U80) |
| 1-501-349-11 | ANTENNA, LOOP |
| 1-501-224-00 | (US,AEP)....ANTENNA, FEEDER |
| 3-769-886-11 | (AEP).....MANUAL, INSTRUCTION |
| 3-769-886-21 | (US).....MANUAL, INSTRUCTION |
| 3-769-886-41 | (WG).....MANUAL, INSTRUCTION |
| *4-924-954-01 | INDIVIDUAL CARTON |
| *4-925-024-01 | CUSHION |

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Sony Corporation
Audio Group



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